



BOOK 2



**Time to Succeed with Mathematics**





## What Is Covered In This Book?

### Objective 1, Number and Algebra

- Write and solve problems involving whole, decimal numbers, percentages and fractions using a range of strategies and with an appreciation for the sensibleness of the answer.
- Order and understand placement of digits in whole numbers, decimal numbers and fractions.
- Recall basic multiplication and division facts. Recognise that numbers can be partitioned and combined using addition and or multiplication.
- Express fractions as decimals, decimals as percentages and vice versa.
- Explain the meaning of negative and positive numbers.
- Recognise relationships and calculate further using any rule formed.
- Be able to correctly use symbols, and notation to represent linear relationships and then to solve unknowns in any equations formed.
- Sketch and use graphs to illustrate relationships.
- Develop skills and confidence in the language of maths. Develop characteristics of logical and systematic thinking which can then be applied to mathematical problems and to other areas of learning.

### Objective 2, Geometry and Measurement

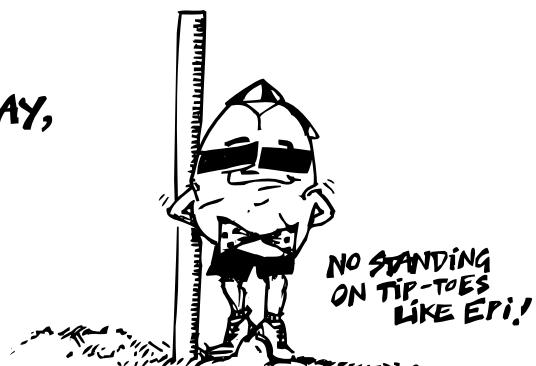
- Recognise relations and geometrical properties in two and three dimensions.
- Represent objects with drawings and models e.g. by being able to construct triangles, circles and polyhedra.
- Recognise and define plane shapes, prisms, pyramids, cones and spheres.
- Draw, interpret and specify locations using bearings and simple map scales.
- Describe and design patterns in terms of reflection, rotation, translation and enlargement.
- Measure using correct units for length, mass, volume, temperature and money. Read aspects of both calendar time and clock time.
- Use mathematical instruments and measuring devices with confidence and competence.
- Understand and calculate metric measures such as area, perimeter and volume of triangular, rectangular and circular objects.

### Objective 3, Statistics

- Collect and sort data into categories.
- Represent the findings of a statistical enquiry on an appropriate graph, and identify any patterns or trends within and between the data sets.
- Interpret and present data, predict and calculate, organise and analyse.
- Evaluate the effectiveness of different displays for any sets of data.
- Plan and present a statistical experiment using appropriate graphs.
- Estimate possible outcomes for a sequence of events.
- Investigate chance situations by comparing trial results with predictions, recognising variation and using simple fractions to describe probabilities.

# THE REACHING NEW HEIGHTS SURVEY!

- 1** RECORD YOUR HEIGHT AND THE HEIGHT OF A FRIEND.
- 2** DO YOUR SURVEY IN FEBRUARY, MAY, AUGUST, & NOVEMBER.
- 3** FILL IN THE CHART, AND GRAPH YOUR RESULTS!

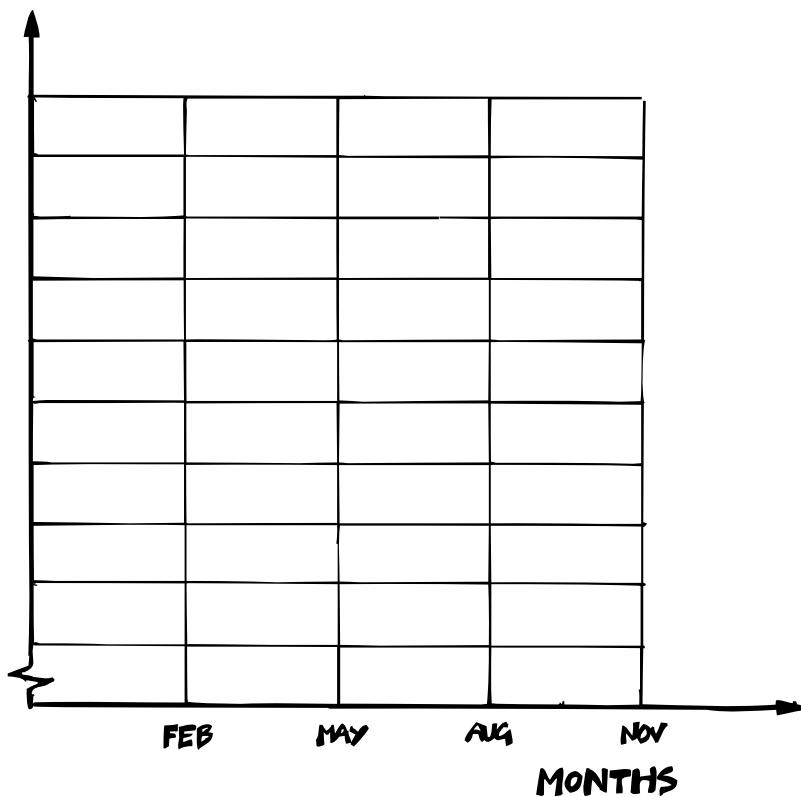


## RESULTS CHART

NAME		
HEIGHTS	-FEB	-FEB
	-MAY	-MAY
	-AUG	-AUG
	-NOV	-NOV
TOTAL HEIGHT		
GROWTH	cm	cm

## HEIGHTS GRAPH

PLOT THE LINE OF YOUR CHANGE IN HEIGHT. USE A DIFFERENT COLOUR FOR EACH PERSON!



-TRY MEASURING YOUR TEACHER. DO THEY GROW OR SHRINK?

# - ADDITION IS EASY WHEN YOU KNOW HOW AND YOU KNOW HOW!

M.G.ADDITION



$5+2=$	$8+1=$	$1+3=$	$2+6=$	$2+2=$
$1+2=$	$0+4=$	$6+3=$	$0+5=$	$4+0=$
$5+5=$	$4+1=$	$1+7=$	$3+2=$	$9+2=$
$1+6=$	$1+1=$	$2+9=$	$6+6=$	$2+8=$
$0+2=$	$8+8=$	$2+7=$	$7+2=$	$4+8=$
$4+2=$	$7+1=$	$7+7=$	$5+6=$	$0+1=$
$4+6=$	$3+4=$	$0+9=$	$2+0=$	$3+6=$

(DON'T FORGET TO CORRECT YOUR MISTAKES)

$11+4=$	$16+8=$	$11+9=$	$19+19=$	$25+14=$
$14+1=$	$11+8=$	$14+7=$	$10+13=$	$25+18=$
$13+8=$	$19+4=$	$19+3=$	$14+13=$	$23+17=$
$13+4=$	$11+7=$	$17+9=$	$13+17=$	$38+18=$
$12+8=$	$12+3=$	$19+7=$	$18+13=$	$34+15=$
$16+1=$	$16+7=$	$15+3=$	$17+19=$	$36+25=$
$17+4=$	$18+3=$	$17+6=$	$15+13=$	$29+39=$

NOW SHADE IN ANY SQUARES WITH WRONG ANSWERS!

DID YOU MAKE AN ERROR?!

M.G.ADDITION IS ONE GUY WHO KNOWS THE BENEFIT OF ARITHMETIC!

+	5	8	9	3	2	4	11	6	7	10	5	9
2	7	10	11	5	4	6	13	8	9	12	7	11
4	6	10	15	7	6	8	15	10	11	14	9	13
9	10	17	18	12	10	13	14	15	16	19	14	18
6	2	14	15	5	8	9	17	12	13	16	11	15
2	4	9	11	4	4	5	13	8	9	12	7	15
4	11	12	13	6	6	10	15	10	11	14	6	13
6	15	14	15	9	8	10	18	24	19	16	9	15
3	10	24	7	6	5	7	6	9	5	13	12	12
7	12	15	16	10	9	11	12	13	20	17	16	16
1	6	9	10	4	3	5	14	3	5	11	6	10

# MORE ADDITION - SUM PEOPLE ARE WONDERFUL!

$$\begin{array}{r}
 2 & 8 & 6 & 5 & 2 & 5 \\
 8 & 8 & 5 & 2 & 6 & 6 \\
 4 & 1 & 0 & 6 & 6 & 6 \\
 \underline{5} & \underline{2} & \underline{5} & \underline{6} & \underline{5} & \underline{9} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 51 & 48 & 84 & 26 & 50 & 85 \\
 42 & 52 & 48 & 60 & 25 & 99 \\
 24 & 88 & 16 & 25 & 66 & 77 \\
 \underline{54} & \underline{64} & \underline{93} & \underline{42} & \underline{83} & \underline{33} \\
 \hline
 \end{array}$$

COMPLETE THE TABLES

+	12	20	27	31	36	49
29						
14						
35						

+	52	48	39	32	24	17
27						
51						
40						

+	48	54	83	27	47	36	65	56	72	45
0	49	53	83	37	47	26	65	57	82	25
6	43	60	89	32	53	41	71	60	78	50
5	22	59	88	33	52	40	70	51	78	49
1	50	53	84	30	38	36	66	58	73	46
2	50	56	80	28	50	39	66	68	76	47
8	56	62	88	37	58	28	70	64	81	53
9	57	63	89	18	40	44	62	66	80	54
4	52	58	83	32	45	41	59	60	76	49

SHADE IN THE MISTAKES TO MAKE AN EVERYDAY ITEM!



# CALCULATOR ADDITION

- CLAUDIA CALCULATOR WILL HELP YOU WITH  
THIS PAGE!



THE FIRST SUMS!

246	380	907	591	816
+ 217	+ 106	+ 157	+ 288	+ 346
—	—	—	—	—

4123	6328	2479	8060	7589
+ 2915	+ 4980	+ 756	+ 987	+ 4297
—	—	—	—	—

- COMPLETE THESE TABLES

+	119	126	232	273	317
148					
672					

+	101	143	211	215	216
419					
564					

MORE SUMS TO SOLVE!

3456	1673	3124	1543	2165
+ 651	+ 5836	+ 7519	+ 3110	+ 1972
+ 1948	+ 4883	+ 2196	+ 5490	+ 2788
—	—	—	—	—

SPEED TEST

SEE IF YOU CAN GET ALL THESE CORRECT  
IN 10 MINUTES!

5	70	75	16	392	695
+ 8	+ 58	+ 99	+ 55	+ 973	+ 128
+ 2	+ 46	+ 98	+ 76	+ 846	+ 834
+ 5	+ 24	+ 85	+ 90	—	—
—	—	—	—	—	—

893	597	8683	685	340	237
+ 565	+ 288	+ 9187	+ 196	+ 195	+ 185
—	—	—	—	+ 708	+ 714
—	—	—	—	—	—

MY SCORE IS \_\_\_\_\_  
CORRECT ANY MISTAKES

# - D.J. ELAINE EQUAL'S SIMPLY SENSATIONAL SUBTRACTION!



$36 - 14 =$

$96 - 44 =$

$38 - 16 =$

$39 - 26 =$

$29 - 16 =$

$86 - 32 =$

$72 - 40 =$

$75 - 63 =$

$38 - 17 =$

$79 - 56 =$

$87 - 35 =$

$99 - 38 =$

$47 - 23 =$

$93 - 40 =$

$46 - 15 =$

$74 - 30 =$

$84 - 34 =$

$88 - 35 =$

$65 - 32 =$

$94 - 62 =$

$59 - 35 =$

$79 - 24 =$

$84 - 71 =$

$79 - 27 =$

$\underline{488}$

$\underline{-307}$

$\underline{650}$

$\underline{789}$

$\underline{-236}$

$\underline{-420}$

$\underline{-573}$

$\underline{594}$

$\underline{978}$

$\underline{672}$

$\underline{536}$

$\underline{-562}$

$\underline{-547}$

$\underline{-341}$

$\underline{-224}$

REPLACE EACH ANSWER WITH ITS LETTER IN THE  
CODED MESSAGE!

$\boxed{A} \quad \begin{array}{r} 896 \\ -222 \\ \hline \end{array}$

$\boxed{I} \quad \begin{array}{r} 796 \\ -284 \\ \hline \end{array}$

$\boxed{H} \quad \begin{array}{r} 996 \\ -84 \\ \hline \end{array}$

$\boxed{T} \quad \begin{array}{r} 798 \\ -476 \\ \hline \end{array}$

$\boxed{S} \quad \begin{array}{r} 469 \\ -154 \\ \hline \end{array}$

$\boxed{R} \quad \begin{array}{r} 465 \\ -333 \\ \hline \end{array}$

$\boxed{V} \quad \begin{array}{r} 797 \\ -402 \\ \hline \end{array}$

$\boxed{P} \quad \begin{array}{r} 867 \\ -253 \\ \hline \end{array}$

$\boxed{E} \quad \begin{array}{r} 398 \\ -157 \\ \hline \end{array}$

$\boxed{L} \quad \begin{array}{r} 556 \\ -341 \\ \hline \end{array}$

$\boxed{G} \quad \begin{array}{r} 887 \\ -350 \\ \hline \end{array}$

$\boxed{N} \quad \begin{array}{r} 326 \\ -105 \\ \hline \end{array}$

$\boxed{O} \quad \begin{array}{r} 799 \\ -408 \\ \hline \end{array}$

D.J. ELAINE EQUAL: "DOCTOR, I THINK I HAVE INSOMNIA"  
DOCTOR:

$\overline{322} \ \overline{912} \ \overline{674} \ \overline{322} \ \overline{315} \quad \overline{221} \ \overline{391} \ \overline{322} \ \overline{912} \ \overline{512} \ \overline{221} \ \overline{537}$

$\overline{322} \ \overline{391} \quad \overline{215} \ \overline{391} \ \overline{315} \ \overline{241} \quad \overline{315} \ \overline{215} \ \overline{241} \ \overline{241} \ \overline{614} \quad \overline{391} \ \overline{395} \ \overline{241} \ \overline{132}$  !

# -FRESH SUBTRACTION FROM ELAINE!

TAKEAWAYS TASTE BEST!

$\begin{array}{r} 43 \\ -27 \\ \hline \end{array}$	$\begin{array}{r} 33 \\ -18 \\ \hline \end{array}$	$\begin{array}{r} 62 \\ -46 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ -37 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -27 \\ \hline \end{array}$	$\begin{array}{r} 83 \\ -56 \\ \hline \end{array}$
$\begin{array}{r} 82 \\ -58 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ -39 \\ \hline \end{array}$	$\begin{array}{r} 62 \\ -37 \\ \hline \end{array}$	$\begin{array}{r} 57 \\ -49 \\ \hline \end{array}$	$\begin{array}{r} 38 \\ -19 \\ \hline \end{array}$	$\begin{array}{r} 40 \\ -22 \\ \hline \end{array}$
$\begin{array}{r} 32 \\ -14 \\ \hline \end{array}$	$\begin{array}{r} 76 \\ -38 \\ \hline \end{array}$	$\begin{array}{r} 92 \\ -39 \\ \hline \end{array}$	$\begin{array}{r} 70 \\ -26 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ -29 \\ \hline \end{array}$	$\begin{array}{r} 57 \\ -48 \\ \hline \end{array}$
$\begin{array}{r} 74 \\ -38 \\ \hline \end{array}$	$\begin{array}{r} 72 \\ -25 \\ \hline \end{array}$	$\begin{array}{r} 81 \\ -65 \\ \hline \end{array}$	$\begin{array}{r} 38 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 70 \\ -44 \\ \hline \end{array}$	$\begin{array}{r} 81 \\ -27 \\ \hline \end{array}$
$\begin{array}{r} \\ \\ \hline \end{array}$					

## -NOW TRY THIS PUZZLE!

"WHAT DID ONE TAILPIPE SAY  
TO THE OTHER?"



D.J. ELAINE EQUAL

<b>R</b> $\begin{array}{r} 34 \\ -16 \\ \hline \end{array}$	<b>I</b> $\begin{array}{r} 82 \\ -27 \\ \hline \end{array}$	<b>S</b> $\begin{array}{r} 47 \\ -39 \\ \hline \end{array}$	<b>L</b> $\begin{array}{r} 88 \\ -29 \\ \hline \end{array}$	<b>Y</b> $\begin{array}{r} 72 \\ -25 \\ \hline \end{array}$
<b>H</b> $\begin{array}{r} 55 \\ -48 \\ \hline \end{array}$	<b>V</b> $\begin{array}{r} 70 \\ -47 \\ \hline \end{array}$	<b>E</b> $\begin{array}{r} 81 \\ -14 \\ \hline \end{array}$	<b>M</b> $\begin{array}{r} 37 \\ -9 \\ \hline \end{array}$	<b>O</b> $\begin{array}{r} 45 \\ -18 \\ \hline \end{array}$
<b>D</b> $\begin{array}{r} 95 \\ -76 \\ \hline \end{array}$	<b>B</b> $\begin{array}{r} 66 \\ -29 \\ \hline \end{array}$	<b>T</b> $\begin{array}{r} 74 \\ -9 \\ \hline \end{array}$	<b>X</b> $\begin{array}{r} 67 \\ -28 \\ \hline \end{array}$	<b>A</b> $\begin{array}{r} 80 \\ -8 \\ \hline \end{array}$

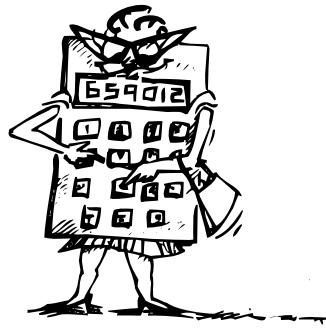


37 27 47    55    72 28    18 67 72 59 59 47  
67 39 7 72 23 8 65 67 19 !?

# CALCULATOR SUBTRACTION

— USE MISS CLAUDIA CALCULATOR  
TO HELP YOU SOLVE  
THE PROBLEMS BELOW!

START  
SUBTRACTING!



$356$	$480$	$917$	$592$	$8463$
$-267$	$-195$	$-357$	$-198$	$-3582$
_____	_____	_____	_____	_____
$4123$	$6238$	$5305$	$3918$	$2345$
$-2035$	$-3159$	$-4276$	$-1838$	$-587$
_____	_____	_____	_____	_____
$10000$	$20000$	$10000$	$20000$	$2000$
$-4567$	$-8765$	$-9312$	$-11843$	$-1635$
_____	_____	_____	_____	_____
$12345$	$24321$	$43860$	$10101010$	
$-1234$	$-4235$	$-10872$	$-10010101$	
_____	_____	_____	_____	_____

## SPEED TEST

SEE IF YOU CAN GET ALL THESE CORRECT  
IN 10 MINUTES!

$86$	$401$	$685$	$52$	$594$
$-68$	$-107$	$-219$	$-25$	$-387$
_____	_____	_____	_____	_____
$893$	$6832$	$5476$	$2469$	$4616$
$-656$	$-769$	$-2388$	$-875$	$-3727$
_____	_____	_____	_____	_____

$$2547 - 365 = \underline{\hspace{2cm}}$$

$$9015 - 876 = \underline{\hspace{2cm}}$$

MY SCORE IS \_\_\_\_\_  
CORRECT ANY MISTAKES!

**- P.J. ELAINE EQUAL'S  
"NOVEL-NODLUM"**



$$7 + 8 =$$

$$5 + 9 =$$

$$12 + 6 =$$

$$14 + 7 =$$

$$11 + 18 =$$

$$13 + 19 =$$

$$17 + 16 =$$

$$20 + 17 =$$

$$\begin{array}{r} 6 \\ 5 \\ 5 \\ \hline 6 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 9 \\ 7 \\ 6 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 10 \\ 11 \\ 12 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 20 \\ 21 \\ 22 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 66 \\ 60 \\ 52 \\ \hline 28 \end{array}$$

$$\begin{array}{r} 79 \\ 58 \\ 99 \\ \hline 88 \end{array}$$

$$\begin{array}{r} 127 \\ +193 \\ \hline \end{array}$$

$$\begin{array}{r} 440 \\ +295 \\ \hline \end{array}$$

$$\begin{array}{r} 307 \\ +199 \\ \hline \end{array}$$

$$\begin{array}{r} 4306 \\ +2541 \\ \hline \end{array}$$

$$\begin{array}{r} 7885 \\ +2036 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \\ -19 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ -21 \\ \hline \end{array}$$

$$\begin{array}{r} 61 \\ -41 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ -16 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ -28 \\ \hline -44 \end{array}$$

$$\begin{array}{r} 828 \\ -516 \\ \hline \end{array}$$

$$\begin{array}{r} 689 \\ -357 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ -29 \\ \hline \end{array}$$

$$\begin{array}{r} 740 \\ -180 \\ \hline \end{array}$$

$$\begin{array}{r} 555 \\ -372 \\ \hline \end{array}$$

$$\begin{array}{r} 846 \\ -358 \\ \hline \end{array}$$

$$\begin{array}{r} 927 \\ -539 \\ \hline \end{array}$$

$$\begin{array}{r} 450 \\ -186 \\ \hline \end{array}$$

$$\begin{array}{r} 321 \\ -195 \\ \hline \end{array}$$

$$\begin{array}{r} 4396 \\ -1859 \\ \hline \end{array}$$

**WHERE DO BABY APES SLEEP?**

$$\begin{array}{r} 45 \\ +38 \\ \hline T \end{array} \quad \begin{array}{r} 36 \\ +18 \\ \hline C \end{array} \quad \begin{array}{r} 67 \\ +17 \\ \hline R \end{array} \quad \begin{array}{r} 39 \\ +52 \\ \hline A \end{array} \quad \begin{array}{r} 38 \\ -12 \\ \hline I \end{array} \quad \begin{array}{r} 139 \\ -111 \\ \hline O \end{array} \quad \begin{array}{r} 76 \\ -19 \\ \hline P \end{array} \quad \begin{array}{r} 963 \\ -888 \\ \hline N \end{array} \quad \begin{array}{r} 21 \\ +34 \\ \hline S \end{array}$$

$$\begin{array}{r} 26 \\ 75 \\ \hline 91 \end{array} \quad \begin{array}{r} 57 \\ 84 \\ \hline 81 \end{array} \quad \begin{array}{r} 26 \\ 54 \\ \hline 28 \end{array} \quad \begin{array}{r} 83 \\ 89 \\ \hline \end{array}$$

**MAXWELL THE MIGHTY MULTIPLYING MOUSE RECKONS... "MULTIPLICATION IS THE KEY TO SUCCESS!!"**

...AND HE'S RIGHT!



- START BY SOLVING THESE PROBLEMS.

$3 \times 4 =$

$6 \times 7 =$

$4 \times 9 =$

$8 \times 8 =$

$2 \times 8 =$

$8 \times 9 =$

$7 \times 5 =$

$6 \times 9 =$

$5 \times 6 =$

$9 \times 2 =$

$4 \times 4 =$

$1 \times 4 =$

$4 \times 6 =$

$1 \times 1 =$

$6 \times 6 =$

$3 \times 2 =$

$5 \times 5 =$

$2 \times 2 =$

$4 \times 0 =$

$3 \times 3 =$

$9 \times 1 =$

$3 \times 8 =$

$6 \times 1 =$

$9 \times 9 =$

$3 \times 9 =$

$5 \times 1 =$

$4 \times 8 =$

$6 \times 5 =$

$4 \times 7 =$

$7 \times 2 =$

$7 \times 9 =$

$0 \times 3 =$

- NOW COMPLETE THE MULTIPLE TABLES!

x 8	8	16									
-----	---	----	--	--	--	--	--	--	--	--	--

x 10	10										
------	----	--	--	--	--	--	--	--	--	--	--

x 11											
------	--	--	--	--	--	--	--	--	--	--	--

SHADE IN ALL THE MISTAKES!  
WHAT DO YOU GET?



x	4	6	2	9	5	8	1	7	0	3
2	6	12	9	18	12	10	2	15	0	9
6	20	36	18	54	35	48	6	44	0	22
8	30	50	16	72	35	65	8	65	8	21
4	24	24	6	36	9	32	4	28	4	12
1	5	6	5	9	8	10	1	7	1	3
3	12	18	6	27	15	24	3	21	0	9
0	4	6	2	0	0	0	0	0	0	0
5	9	30	7	40	20	45	10	45	5	10
7	30	11	15	63	35	56	10	49	7	20
9	36	54	18	81	45	72	11	63	9	30

**YES, MAXWELL JUST GETS SO  
EXCITED AT THE PROSPECT  
OF MORE MULTIPLYING!!**

MAXWELL, THE MIGHTY MULTIPLYING  
MOUSE, MOVES MAJESTICALLY TO M.C. ADDITION'S  
MULTIPLYING MELODIES!



$10 \times 10 = \underline{\hspace{2cm}}$

$10 \times 10 \times 10 = \underline{\hspace{2cm}}$

$100 \times 10 = \underline{\hspace{2cm}}$

$10 \times 100 = \underline{\hspace{2cm}}$

$10 \times 10 \times 10 \times 10 = \underline{\hspace{2cm}}$

$10 \times 1000 = \underline{\hspace{2cm}}$

$100 \times 100 = \underline{\hspace{2cm}}$

$1000 \times 100 = \underline{\hspace{2cm}}$

$1000 \times 1000 = \underline{\hspace{2cm}}$

PRODUCT	THiNK	ANSWER
$70 \times 40$	$\rightarrow (7 \times 4) \times (10 \times 10)$	$\rightarrow \underline{\hspace{2cm}}$
$60 \times 80$	$\rightarrow (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \times (10 \times 10)$	$\rightarrow \underline{\hspace{2cm}}$
$80 \times 90$	$\rightarrow (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \times (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$	$\rightarrow \underline{\hspace{2cm}}$

-NOW USE THE METHOD ABOVE TO FIND THE ANSWERS BELOW!

$60 \times 70 = \underline{\hspace{2cm}}$

$90 \times 30 = \underline{\hspace{2cm}}$

$20 \times 80 = \underline{\hspace{2cm}}$

$70 \times 80 = \underline{\hspace{2cm}}$

$50 \times 90 = \underline{\hspace{2cm}}$

$20 \times 90 = \underline{\hspace{2cm}}$

$80 \times 30 = \underline{\hspace{2cm}}$

$60 \times 30 = \underline{\hspace{2cm}}$

$40 \times 60 = \underline{\hspace{2cm}}$

$50 \times 60 = \underline{\hspace{2cm}}$

$30 \times 50 = \underline{\hspace{2cm}}$

$70 \times 20 = \underline{\hspace{2cm}}$

$60 \times 60 = \underline{\hspace{2cm}}$

$40 \times 40 = \underline{\hspace{2cm}}$

PRODUCT	THiNK	ANSWER
$20 \times 600$	$\rightarrow (2 \times 6) \times (10 \times 100)$	$\rightarrow \underline{\hspace{2cm}}$

$30 \times 400 \rightarrow (3 \times 4) \times (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \rightarrow \underline{\hspace{2cm}}$

$50 \times 8000 \rightarrow (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \times (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}}) \rightarrow \underline{\hspace{2cm}}$

**WRITE ANSWERS ONLY FOR THE PROBLEMS BELOW**

$30 \times 500 = \underline{\hspace{2cm}}$

$70 \times 800 = \underline{\hspace{2cm}}$

$50 \times 8000 = \underline{\hspace{2cm}}$

$70 \times 300 = \underline{\hspace{2cm}}$

$80 \times 500 = \underline{\hspace{2cm}}$

$90 \times 4000 = \underline{\hspace{2cm}}$

$80 \times 900 = \underline{\hspace{2cm}}$

$40 \times 600 = \underline{\hspace{2cm}}$

$400 \times 400 = \underline{\hspace{2cm}}$

$70 \times 400 = \underline{\hspace{2cm}}$

$80 \times 300 = \underline{\hspace{2cm}}$

$700 \times 600 = \underline{\hspace{2cm}}$

$30 \times 700 = \underline{\hspace{2cm}}$

$50 \times 800 = \underline{\hspace{2cm}}$

$600 \times 4000 = \underline{\hspace{2cm}}$

$40 \times 200 = \underline{\hspace{2cm}}$

$500 \times 200 = \underline{\hspace{2cm}}$

$900 \times 9000 = \underline{\hspace{2cm}}$

$90 \times 200 = \underline{\hspace{2cm}}$

$700 \times 900 = \underline{\hspace{2cm}}$

# MORE MULTIPLICATION - MAKE A TOP PRODUCT!

-START WITH THESE PROBLEMS!

$$\begin{array}{r} 26 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 51 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 32 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 93 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 54 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 65 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 212 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 190 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 345 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 411 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 173 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 241 \\ \times 8 \\ \hline \end{array}$$

-COMPLETE THE MULTIPLE STICKS

$\times 20$	20	40	60								
-------------	----	----	----	--	--	--	--	--	--	--	--

$\times 16$											
-------------	--	--	--	--	--	--	--	--	--	--	--

$\times 12$											
-------------	--	--	--	--	--	--	--	--	--	--	--

-NOW SOLVE THESE PROBLEMS!

$$\begin{array}{r} 25 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 43 \\ \times 13 \\ \hline \end{array} \quad \begin{array}{r} 39 \\ \times 13 \\ \hline \end{array} \quad \begin{array}{r} 23 \\ \times 14 \\ \hline \end{array} \quad \begin{array}{r} 55 \\ \times 14 \\ \hline \end{array} \quad \begin{array}{r} 42 \\ \times 15 \\ \hline \end{array}$$

$$\begin{array}{r} 136 \\ \times 10 \\ \hline \end{array} \quad \begin{array}{r} 785 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 249 \\ \times 11 \\ \hline \end{array} \quad \begin{array}{r} 412 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 587 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 350 \\ \times 9 \\ \hline \end{array}$$

-SHADE IN ALL  
THE SQUARES  
WITH WRONG  
ANSWERS!

"MULTIPLICATION  
-A SIGN OF THE  
",

x	5	8	9	3	2	4	11	6	7	10	5	9
2	10	16	18	6	4	8	22	12	14	20	10	18
4	20	32	36	12	8	16	44	20	28	40	20	36
9	45	72	81	27	18	36	90	54	63	90	45	81
6	35	48	54	18	15	24	66	36	48	50	20	54
2	10	12	18	8	4	8	22	12	10	20	5	18
4	20	32	32	12	8	16	44	24	30	40	20	36
6	30	50	54	12	12	24	66	36	42	40	30	54
3	9	24	27	9	5	12	33	18	21	30	10	27
7	35	56	63	21	14	28	77	42	39	70	30	63
1	5	8	9	3	2	4	11	6	5	9	2	9

# MAXWELL'S MULTIPLICATION MANIA!

-COMPLETE THE TABLES AND WORK OUT THE ANSWERS TO THE PROBLEMS!



<b>X</b>	7	8	3	0	4	9
8						
3						
6						
2						

$$(3 \times 7) + 1 = \underline{\quad} \quad (7 \times 6) + 5 = \underline{\quad}$$

$$(6 \times 2) + 0 = \underline{\quad} \quad (2 \times 9) + 0 = \underline{\quad}$$

$$(3 \times 9) + 0 = \underline{\quad} \quad (5 \times 5) + 4 = \underline{\quad}$$

$$(8 \times 8) + 5 = \underline{\quad} \quad (7 \times 8) + 4 = \underline{\quad}$$

$$(2 \times 2) + 1 = \underline{\quad} \quad (9 \times 2) + 7 = \underline{\quad}$$

$$(5 \times 8) + 3 = \underline{\quad} \quad (9 \times 5) + 5 = \underline{\quad}$$

$$(7 \times 3) + 3 = \underline{\quad} \quad (9 \times 0) + 8 = \underline{\quad}$$

$$(5 \times 6) + 4 = \underline{\quad} \quad (3 \times 8) + 0 = \underline{\quad}$$

<b>X</b>	3	9	5	7	6	4
2						
5						
7						
1						
9						

<b>X</b>	0	6	7	9	3	8
4						
11						
6						
12						

$$(4 \times 3) + 3 = \underline{\quad} \quad (8 \times 6) + 7 = \underline{\quad}$$

$$(4 \times 0) + 0 = \underline{\quad} \quad (8 \times 2) + 6 = \underline{\quad}$$

$$(4 \times 9) + 3 = \underline{\quad} \quad (6 \times 4) + 4 = \underline{\quad}$$

$$(9 \times 0) + 8 = \underline{\quad} \quad (3 \times 6) + 0 = \underline{\quad}$$

NOW USE YOUR MULTIPLICATION KNOWLEDGE TO FILL IN THE GAPS BELOW!

$$5 \times 8 = 4 \times \underline{\quad}$$

$$5 \times \underline{\quad} = 10 \times 3$$

$$42 \times 1 = 7 \times \underline{\quad}$$

$$7 \times \underline{\quad} = 5 \times 7$$

$$8 \times \underline{\quad} = 1 \times 64$$

$$9 \times 8 = \underline{\quad} \times 6$$

$$5 \times \underline{\quad} = 35 \times 2$$

$$6 \times 6 = 4 \times \underline{\quad}$$

$$12 \times 10 = \underline{\quad} \times 3$$

$$6 \times 3 = 9 \times \underline{\quad}$$

$$6 \times 4 = 3 \times \underline{\quad}$$

$$10 \times \underline{\quad} = 4 \times 20$$

$$2 \times 12 = 4 \times \underline{\quad}$$

$$7 \times 15 = \underline{\quad} \times 3$$

ALL THIS  
MULTIPLYING LEAVES  
MAXWELL A LITTLE  
EXHAUSTED! :zz:



**"DIANNE, DO YOU DEFINITELY  
FIND DIVISION EASY?" "YES!"**



$15 \div 3 =$

$36 \div 9 =$

DIVINE DIANNE  
THE DIVIDING DOORMOUSE

$20 \div 4 =$

$5 \div 1 =$

$60 \div 6 =$

$24 \div 3 =$

$30 \div 5 =$

$10 \div 10 =$

$56 \div 7 =$

$32 \div 4 =$

$16 \div 8 =$

$36 \div 3 =$

$26 \div 2 =$

$15 \div 5 =$

$18 \div 6 =$

$44 \div 4 =$

$63 \div 9 =$

$40 \div 8 =$

$28 \div 7 =$

$45 \div 5 =$

$8 \div 1 =$

$36 \div 6 =$

$14 \div 2 =$

$72 \div 8 =$

$90 \div 10 =$

$14 \div 7 =$

$40 \div 2 =$

$27 \div 9 =$

$13 \div 1 =$

$50 \div 10 =$

$10 \overline{)80}$

$6 \overline{)48}$

$7 \overline{)42}$

$5 \overline{)25}$

$9 \overline{)54}$

$4 \overline{)16}$

$9 \overline{)90}$

$10 \overline{)60}$

$7 \overline{)49}$

$5 \overline{)100}$

$9 \overline{)72}$

$6 \overline{)24}$

$4 \overline{)28}$

$8 \overline{)56}$

$10 \overline{)40}$

$6 \overline{)42}$

$9 \overline{)45}$

$2 \overline{)22}$

$3 \overline{)27}$

$9 \overline{)81}$

**HOW CAN WE MAKE DIVISION EASY?**

**DO THESE SUMS TO DECODE DIANNE'S HELPFUL HINT!**

**T**  $\frac{20}{5}$

**O**  $\frac{66}{6}$

**K**  $\frac{200}{10}$

**Y**  $\frac{90}{3}$

**S**  $12 \overline{)192}$

**V**  $\frac{24}{4}$

**M**  $\frac{63}{7}$

**I**  $\frac{18}{9}$

**R**  $\frac{60}{1}$

**W**  $11 \overline{)132}$

**N**  $\frac{30}{3}$

**L**  $\frac{24}{8}$

**P**  $\frac{100}{2}$

**E**  $\frac{91}{7}$

**A**  $12 \overline{)480}$

"

$\overline{50} \ \overline{3} \ \overline{13} \ \overline{40} \ \overline{16} \ \overline{13}$

$\overline{9} \ \overline{30}$

$\overline{3} \ \overline{2} \ \overline{4} \ \overline{4} \ \overline{3} \ \overline{13}$

$\overline{50} \ \overline{40} \ \overline{3}$

$\overline{20} \ \overline{10} \ \overline{11} \ \overline{12}$

$\overline{30} \ \overline{11} \ \overline{6} \ \overline{60}$

$\overline{9} \ \overline{6} \ \overline{3} \ \overline{4} \ \overline{2} \ \overline{50} \ \overline{3} \ \overline{13} \ \overline{16}$

!"

(REMEMBER TO CORRECT ANY MISTAKES)

# MORE DIVISION WITH...

...DIVINE DIANNE THE DIVIDING  
DOORMOUSE!  
(MAX'S CRAZY COUSIN!)



$$8 \overline{)1088}$$

$$7 \overline{)1505}$$

$$6 \overline{)1944}$$

$$7 \overline{)3024}$$

$$5 \overline{)840}$$

$$6 \overline{)1548}$$

$$8 \overline{)1880}$$

$$7 \overline{)1358}$$

$$6 \overline{)3294}$$

$$8 \overline{)3408}$$

$$7 \overline{)3255}$$

$$5 \overline{)3285}$$

$$7 \overline{)5691}$$

$$5 \overline{)4245}$$

$$6 \overline{)5706}$$

$$8 \overline{)4344}$$

- COMPLETE  
THE  
DIVIDING  
SQUARES

$$\begin{array}{c} \div \\ \boxed{48} \quad \boxed{6} \quad 8 \\ \hline \boxed{8} \quad \boxed{2} \\ \hline 6 \quad \boxed{2} \end{array} \dots\dots$$

$$\begin{array}{c} \div \\ \boxed{42} \quad \boxed{6} \\ \hline \boxed{14} \quad \boxed{2} \\ \hline \quad \quad \boxed{\phantom{0}} \end{array} \dots\dots$$

$$\begin{array}{c} \div \\ \boxed{200} \quad \boxed{10} \\ \hline \boxed{20} \quad \boxed{5} \\ \hline \quad \quad \boxed{\phantom{0}} \end{array} \dots\dots$$

$$2 \overline{)1368}$$

$$3 \overline{)25560}$$

$$4 \overline{)30124}$$

$$5 \overline{)31210}$$

$$9 \overline{)371079}$$

$$10 \overline{)789520}$$

$$11 \overline{)283910}$$

$$12 \overline{)190872}$$

- SOME TURTLE POWER PUZZLES! "HOW DO YOU RECOGNISE RICH TURTLES?"

$$\overline{28} \ \overline{39} \ \overline{32} \ \overline{42} \quad \overline{34} \ \overline{32} \ \overline{45} \ \overline{49}$$

$$\overline{27} \ \overline{32} \ \overline{23} \ \overline{27} \ \overline{36} \ \overline{32}$$

$$\overline{37} \ \overline{32} \ \overline{35} \ \overline{44}$$

$$\overline{25} \ \overline{34} \ \overline{32} \ \overline{45} \ \overline{28} \ \overline{32} \ \overline{49} \ \overline{25}$$

!"

"WHAT IS GREEN & USES 'SHELL' TO GO 100 Km/h? , ,

$$\overline{45} \quad \overline{28} \ \overline{43} \ \overline{49} \ \overline{28} \ \overline{36} \ \overline{32} \quad \overline{31} \ \overline{37} \quad \overline{45} \quad \overline{25} \ \overline{27} \ \overline{23} \ \overline{49} \ \overline{28} \ \overline{25} \quad \overline{35} \ \overline{45} \ \overline{49}$$

**X**  $336 \div 8$

**K**  $220 \div 5$

**R**  $196 \div 4$

**V**  $258 \div 6$

**N**  $222 \div 6$

**I**  $124 \div 4$

**L**  $180 \div 5$

**C**  $280 \div 8$

**W**  $306 \div 9$

**H**  $273 \div 7$

**O**  $207 \div 9$

**P**  $189 \div 7$

**A**  $540 \div 12$

**T**  $336 \div 12$

**S**  $275 \div 11$

**E**  $352 \div 11$

# CALCULATOR DIVISION

ANOTHER JOB FOR...

...MISS CLAUDIA

CALCULATOR!!



$3780 \div 21 = \underline{\quad}$

$6840 \div 19 = \underline{\quad}$

$8544 \div 16 = \underline{\quad}$

$8150 \div 25 = \underline{\quad}$

$12684 \div 28 = \underline{\quad}$

$14637 \div 17 = \underline{\quad}$

-COMPLETE THESE MULTIPLE BOXES

$18 \times 543 = \boxed{\quad}$

$18 \times 345 = \boxed{\quad}$

$18 \times 262 = \boxed{\quad}$

$23 \times 456 = \boxed{\quad}$

$23 \times 654 = \boxed{\quad}$

$23 \times 191 = \boxed{\quad}$

-NOW DO THESE DIVISION SUMS!

$18) \overline{9774}$

$18) \overline{6210}$

$18) \overline{4716}$

$23) \overline{10488}$

$23) \overline{15042}$

$23) \overline{4393}$

$34) \overline{87414}$

$34) \overline{96084}$

$34) \overline{99756}$

$20) \overline{654300}$

$30) \overline{945600}$

$40) \overline{340840}$

- THE FINAL TEN HAVE A DECIMAL REMAINDER.  
READ THE FIRST DECIMAL PLACE AND WRITE THE LETTER ABOVE THE NUMBER IN THE PUZZLE!

**C**  $352 \div 14$

**E**  $1571 \div 26$

**O**  $941 \div 19$

**A**  $700 \div 16$

**N**  $489 \div 15$

**M**  $1448 \div 24$

**X**  $811 \div 18$

**R**  $650 \div 17$

**T**  $1615 \div 27$

**S**  $1216 \div 21$

"  $\overline{3} \overline{5} \overline{9} \overline{8} \div \overline{8} \overline{2} \overline{4} \overline{7} \overline{8} \overline{5} \overline{6} \overline{4} \overline{4} \overline{7} \overline{9} \overline{Y}$  "  
 $\overline{9} \overline{5} \overline{3} \overline{4} \overline{7} \overline{2} \overline{4} \overline{3} \overline{4} \overline{7} \overline{6} , \overline{6} \overline{5} \overline{8} \overline{4} \overline{0} \overline{7} \overline{1} \overline{8} !$

# MAX & DI TEAM UP TO BRING YOU MORE OF THEIR... **MERITORIOUS MATHS!**



$$3 \times 8 = \underline{\quad}$$

$$9 \times 2 = \underline{\quad}$$

$$5 \times 3 = \underline{\quad}$$

$$7 \times 6 = \underline{\quad}$$

$$4 \times 4 = \underline{\quad}$$

$$5 \times 5 = \underline{\quad}$$

$$7 \times 7 = \underline{\quad}$$

$$9 \times 9 = \underline{\quad}$$

$14$	$15$	$16$	$17$	$18$	$19$
$\times 4$	$\times 5$	$\times 6$	$\times 7$	$\times 8$	$\times 9$
—	—	—	—	—	—

$37$	$124$	$235$	$346$	$132$	$240$
$\times 9$	$\times 3$	$\times 2$	$\times 2$	$\times 3$	$\times 9$
—	—	—	—	—	—

$$70 \div 7 = \underline{\quad}$$

$$60 \div 3 = \underline{\quad}$$

$$64 \div 8 = \underline{\quad}$$

$$42 \div 2 = \underline{\quad}$$

$$81 \div 9 = \underline{\quad}$$

$$45 \div 5 = \underline{\quad}$$

$$40 \div 4 = \underline{\quad}$$

$$30 \div 6 = \underline{\quad}$$

$$12) \overline{108}$$

$$12) \overline{144}$$

$$12) \overline{192}$$

$$12) \overline{240}$$

$$12) \overline{360}$$

$$2) \overline{2568}$$

$$3) \overline{4725}$$

$$4) \overline{65432}$$

$$5) \overline{31475}$$

<b>S</b> $78$	<b>O</b> $39$	<b>Y</b> $27$	<b>I</b> $62$	<b>A</b> $54$
$\times 10$	$\times 8$	$\times 9$	$\times 12$	$\times 7$
—	—	—	—	—

<b>G</b> $\frac{60}{15}$	<b>H</b> $\frac{102}{17}$	<b>T</b> $\frac{100}{20}$	<b>M</b> $\frac{175}{25}$
-----------------------------	------------------------------	------------------------------	------------------------------

“  $\frac{4}{7} \overline{312}$        $\frac{7}{4} \overline{744}$        $\frac{6}{5} \overline{243}$        $\frac{7}{378} \overline{56}$        $\frac{7}{780} !$  ”

# WHIZZ-KIDS WORKSHEET!

- THIS IS THE FIRST OF 30 W.K.W.S. WORK THROUGH THEM, RECORD YOUR RESULTS ON THE GRAPH AT THE BACK OF THE BOOK, & WATCH YOURSELF IMPROVE!

## NIFTY NUMBERS

$15+5 =$ _____	$12 \times 7 =$ _____
$3 \times 12 =$ _____	$4+28 =$ _____
$16+7 =$ _____	$19-17 =$ _____
$20-17 =$ _____	$45 \div 9 =$ _____
$5 \times 0 =$ _____	$55 \div 5 =$ _____
$36 \div 9 =$ _____	$31+11 =$ _____
$13+8 =$ _____	$12-12 =$ _____
$2 \times 26 =$ _____	$13+13 =$ _____
$4 \times 15 =$ _____	$16 \times 3 =$ _____
$99 \div 11 =$ _____	$14+26 =$ _____

## POSSIBLE PATTERNS

2 , 4 , 6 , __ , 10
5 , 10 , 15 , 20 , __
1 , 7 , 13 , __ , 25
50 , 100 , 200 , 400 , __
15 , 35 , 55 , 75 , __
1 , 6 , 10 , 13 , 15 , __
1 , 3 , 7 , 15 , __ , __
100 , 80 , 60 , __ , __
1 , 4 , 10 , 22 , __ , __
2 , 5 , 9 , 14 , __ , __

## THE QUINTUS QUIZ

$$7) 385$$

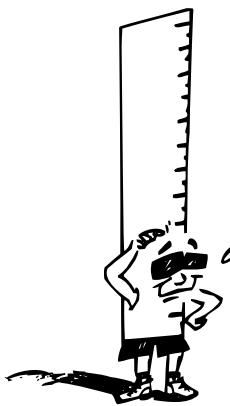
$$6) 768$$

$$4) 88 \quad 3) 99$$

$$11) 1991$$

NUMBER OF MISTAKES \_\_\_\_\_





## RODNEY STANDS BACK TO CONTEMPLATE SOME ELEMENTS OF TRUTH!

THE SET OF MY TEACHERS IS

{ \_\_\_\_\_ }

THE SET OF MY CLOSE FAMILY IS

{ \_\_\_\_\_ }

THE SET OF MY FRIENDS IS

{ \_\_\_\_\_ }

THE SET OF MY FAVORITE THINGS IS

{ \_\_\_\_\_ }

THE SET OF MY CAREER AMBITIONS IS

{ \_\_\_\_\_ }

LIST THE SET OF STUDENTS IN OUR CLASS WHOSE FIRST NAME STARTS WITH THE LETTER :

N	{	_____	}
T	{	_____	}
Z	{	_____	}

LIST THE SET OF:

- OUR T.V. CHANNELS { \_\_\_\_\_ }

- OUR SCHOOL HOLIDAYS { \_\_\_\_\_ }

- LETTERS IN THE WORD 'TEENRAGER' { \_\_\_\_\_ }

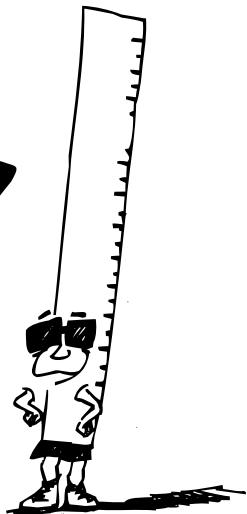
- LETTERS IN THE WORD 'iBBiDDiBiB' { \_\_\_\_\_ }

P	= { 1, 2, 3, 4, 5, 6 }
R	= { 10, 9, 8, 7, 6 }
X	= { 5, 8 }
Z	= { 0, 1, 2 }

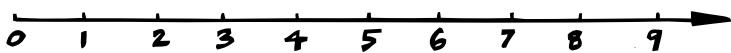
Q	= { 2, 4, 6, 8, 10 } ELEMENTS IN BOTH SETS = { _____ }
S	= { 3, 6, 9, 12 } ELEMENTS IN BOTH SETS = { _____ }
Y	= { 4, 7, 9 } ALL ELEMENTS IN X OR Y = { _____ }
A	= { 1, 2, 3 } ALL ELEMENTS IN A OR Z = { _____ }

# YO! RODNEY RULER is BACK, WITH SOME... ...MAIN LINE MATHS!

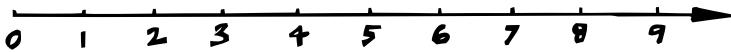
-PLOT EACH SET ON  
THE WHOLE NUMBERLINE  
GIVEN.



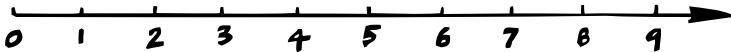
$$\{0, 2, 6, 7, 8\}$$



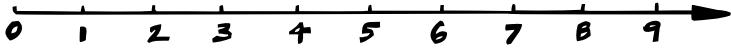
$$\{n < 5\}$$



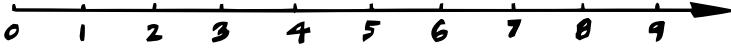
$$\{u < 8\}$$



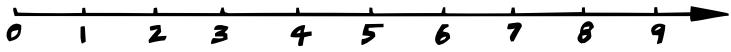
$$\{m \leq 3\}$$



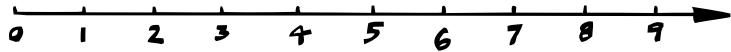
$$\{b > 6\}$$



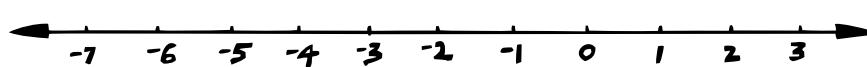
$$\{c > 4\}$$



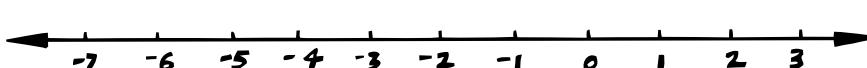
$$\{r \geq 7\}$$



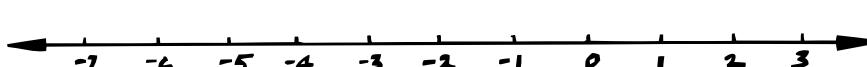
-AND ON  
THESE  
INTEGER  
NUMBER  
LINES



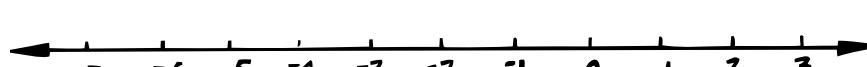
$$\{-2, -1, 0, 1, 2\}$$



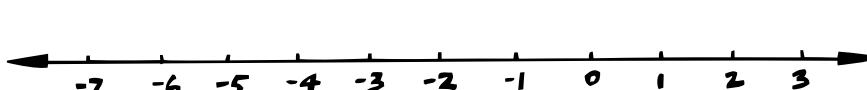
$$\{l < 2\}$$



$$\{i < -3\}$$

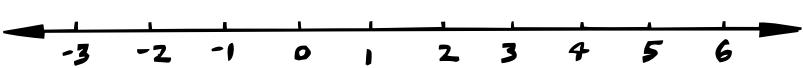


$$\{n \leq -1\}$$

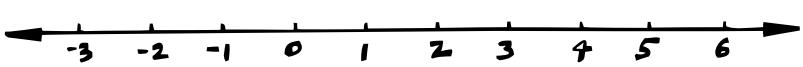


$$\{e > -5\}$$

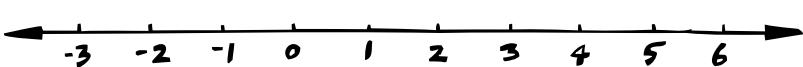
$$\{-2 < y < 4\}$$



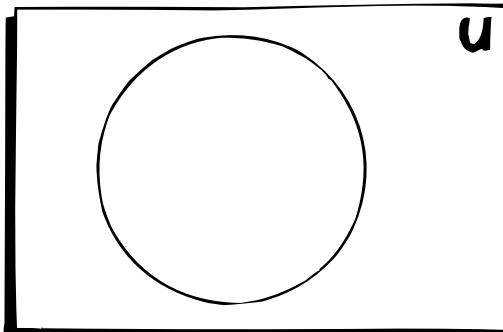
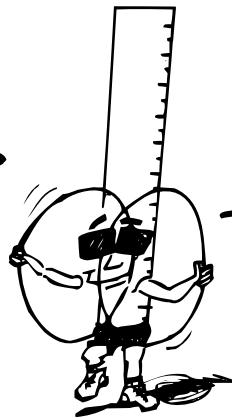
$$\{-3 < E < 2\}$$



$$\{-1 \leq s \leq 6\}$$



# YO! RODNEY RULER is BACK AGAIN WITH SOME... **SIZZLER SETS!**



MY NAME IS \_\_\_\_\_  
THERE ARE \_\_\_\_\_ LETTERS IN MY NAME  
PLACE THE LETTERS INSIDE THE CIRCLE  
IN THE VENN DIAGRAM. U IS THE SET OF ALL LETTERS

-HERE IS ANOTHER VENN DIAGRAM

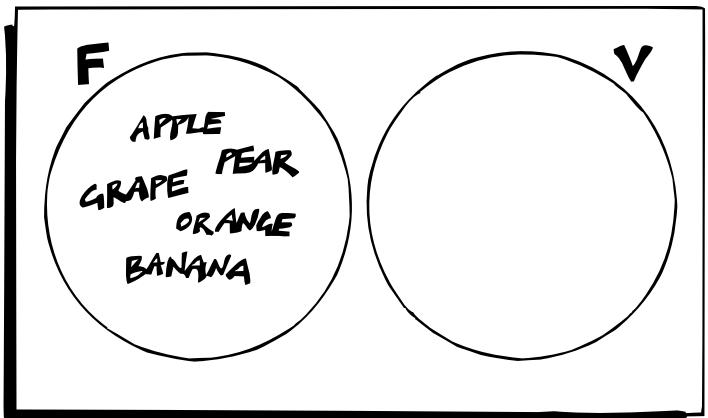
HOW MANY IN SET F? 5

GIVE A NAME TO SET F

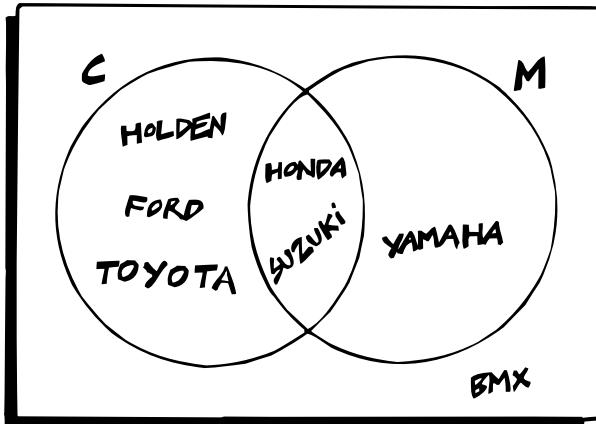
F = { \_\_\_\_\_ }

WHAT WOULD BE A GOOD NAME  
FOR THE UNIVERSAL SET ?

V IS THE SET OF VEGETABLES  
I LIKE - FILL IN THE V CIRCLE



U



U = VEHICLES

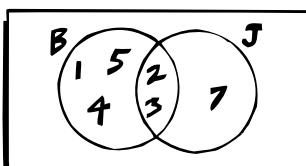
C IS THE SET OF CARS  
M IS THE SET OF MOTORCYCLES  
WHAT BELONGS TO SET C ?

WHAT BELONGS TO SET M ?

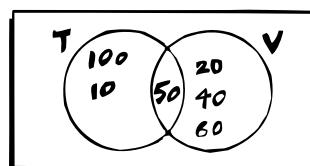
WHICH COMPANIES MAKE BOTH CARS  
& MOTORCYCLES ?

THIS IS THE I ----- SET

WHY IS BMX OUTSIDE THE CIRCLES ?



B = { \_\_\_\_\_ }    J = { \_\_\_\_\_ }    T = { \_\_\_\_\_ }    V = { \_\_\_\_\_ }  
INTERSECTION = { \_\_\_\_\_ }    INTERSECTION = { \_\_\_\_\_ }



AND FINALLY...

# SIMPLY ALGEBRA!



1 APPLE AND 1 APPLE AND 1 APPLE ...  
... YOU HAVE 3 APPLES

$$a + a + a = \underline{\quad}$$

$$b + b + b + b + b = \underline{\quad}$$

$$c + c + c + c = \underline{\quad}$$

$$d + d + d + d + d + d + d = \underline{\quad}$$

$$e + e + e + e + e + e + e + e + e + e = \underline{\quad}$$

$$2f + f = \underline{\quad}$$

$$2g + 3g = \underline{\quad}$$

$$6h + 3h = \underline{\quad}$$

$$5i + 8i = \underline{\quad}$$

$$7j + 14j = \underline{\quad}$$

$$k + 4k + 6k = \underline{\quad}$$

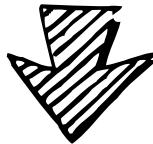
$$2l + 2l + 2l = \underline{\quad}$$

$$8m + 7m = \underline{\quad}$$



YOU'VE GOT 3 DOUGHNUTS, EAT TWO, YOU HAVE 1 DOUGHNUT

-NOW SIMPLIFY



$$3d - 2d = \underline{\quad}$$

$$3e - 3e = \underline{\quad}$$

$$13p - 2p = \underline{\quad}$$

$$16q - 2q = \underline{\quad}$$

$$7r - 4r = \underline{\quad}$$

$$9s - 7s = \underline{\quad}$$

$$8t - 3t = \underline{\quad}$$

$$16v - 5v = \underline{\quad}$$

$$14x - x = \underline{\quad}$$

$$12y - 11y = \underline{\quad}$$

WHAT DO MONSTERS READ IN

THE NEWSPAPER?

-SIMPLIFY THESE EXPRESSIONS TO FIND THE ANSWER

H	$3n + 4n$
E	$6n + 8n$
P	$4n + 5n$
C	$n + 2n + 3n$

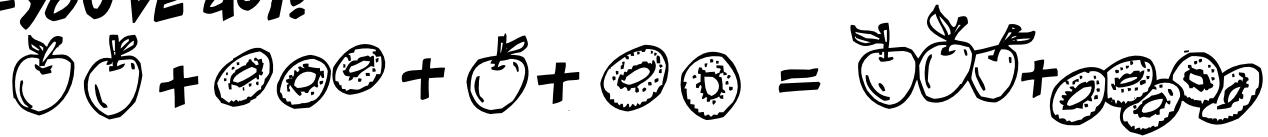
T	$11n - n$
O	$9n - 4n$
S	$15n - 7n$
R	$3n - 2n - n$



$10n$     $7n$     $14n$     $7n$     $5n$     $0$     $0$     $5n$     $0$     $8n$     $6n$     $5n$     $9n$     $14n$     $8n$

# SIMPLIFY AND...

-YOU'VE GOT:



2 APPLES, 3 DOUGHNUTS, 1 APPLE, 2 DOUGHNUTS...  
... YOU HAVE 3 APPLES & 5 DOUGHNUTS

NOW WRITE THESE SUMS IN A SIMPLER WAY

$2a + 3d + a + 2d = \underline{\quad} + \underline{\quad}$

$4a + 2d + 3a + d = \underline{\quad} + \underline{\quad}$

$5e + 6f + 2e + 3f = \underline{\quad} + \underline{\quad}$

$8g + 2h + 4g + 5h = \underline{\quad} + \underline{\quad}$

$10i + 9k + 12i + 17k = \underline{\quad} + \underline{\quad}$

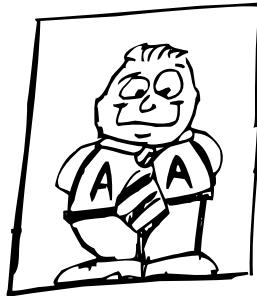
$2t + t + 2v - v = \underline{\quad} + \underline{\quad}$

$6u - 2u + 5n + 4n = \underline{\quad} + \underline{\quad}$

$9r - 3r + 12 + 8 = \underline{\quad} + \underline{\quad}$

$2o - 11 + 7m - 2m = \underline{\quad} + \underline{\quad}$

$12x - 6x + 15z - 8z = \underline{\quad} + \underline{\quad}$



Alfie  
Algebra.

## "DON'T MONKEY AROUND...OK!"

SIMPLIFY THE EXPRESSIONS BELOW,  
AND MATCH THEM WITH THE ANSWERS AT THE BOTTOM  
OF THE PAGE. THEN SHADE IN THE LETTER ABOVE  
TO DISCLOSE PRIMATE PALS.

$10x + 8x$

$5x + 6x + 2$

$4x + 8 + x$

$6 + 3x + 9x$

$9 + x + 2 + 7x$

$2x + 3 + 5x + 10$

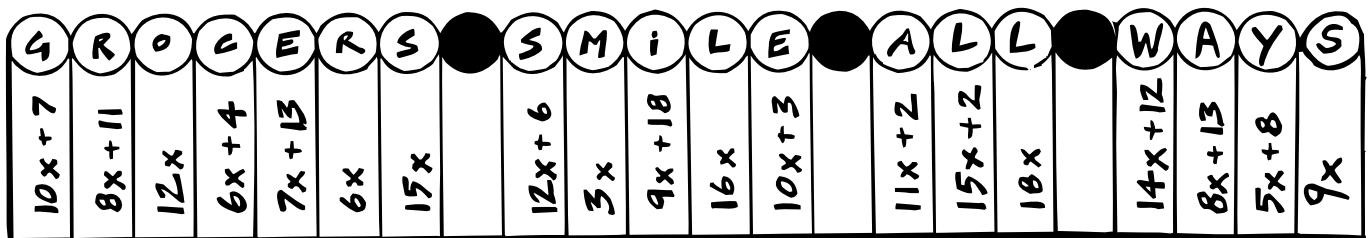
$19x - 4x$

$17x - 11x + 4$

$5 + 10x - 2$

$9x - x - 2x - 3x$

$4 + 3x + 7x + 8 + 4x$



# THE POWER OF ALGEBRA!

## - SOME CONCEPTS TO KNOW

$4c$  MEANS \_\_\_\_\_

$b^c$  MEANS \_\_\_\_\_

$c^2$  MEANS \_\_\_\_\_

$\frac{c}{4}$  MEANS \_\_\_\_\_

## - NOW SIMPLIFY...OK!

$$2a \cdot b = \underline{\hspace{2cm}} \quad 5r \cdot 6r = \underline{\hspace{2cm}} \quad 5n \cdot n = \underline{\hspace{2cm}}$$

$$3c \cdot 4d = \underline{\hspace{2cm}} \quad 5v \cdot v = \underline{\hspace{2cm}} \quad 4q \cdot 3q = \underline{\hspace{2cm}}$$

$$6g \cdot 2h = \underline{\hspace{2cm}} \quad 2a \cdot 3b = \underline{\hspace{2cm}} \quad 10s \cdot 7s = \underline{\hspace{2cm}}$$

$$3m \cdot m = \underline{\hspace{2cm}} \quad 4e \cdot 5f = \underline{\hspace{2cm}} \quad uv \cdot v = \underline{\hspace{2cm}}$$

$$3p \cdot 2p = \underline{\hspace{2cm}} \quad 7i \cdot 10j = \underline{\hspace{2cm}} \quad 8x \cdot 9x = \underline{\hspace{2cm}}$$

$$\frac{20}{10} = \underline{\hspace{2cm}} \quad \frac{ab}{a} = \underline{\hspace{2cm}} \quad \frac{6z}{z} = \underline{\hspace{2cm}}$$

$$\frac{20n}{10} = \underline{\hspace{2cm}} \quad \frac{27}{3} = \underline{\hspace{2cm}} \quad \frac{cd}{c} = \underline{\hspace{2cm}}$$

$$\frac{9v}{v} = \underline{\hspace{2cm}} \quad \frac{27r}{3} = \underline{\hspace{2cm}} \quad \frac{ef}{fe} = \underline{\hspace{2cm}}$$

SIMPLIFY THESE SUMS

TO DISCOVER FRED FROGG'S FAVOURITE DRINK

C	$3v \cdot 5$
K	$2v \cdot 7v$
O	$\frac{48v}{4}$

L	$7v \cdot 2$
R	$5v \cdot 3v$
A	$\frac{48v}{3v}$

$$\overline{15v} \quad \overline{15v^2} \quad \overline{12v} \quad \overline{16} \quad \overline{14v^2} \quad \overline{16}$$

$$\overline{15v} \quad \overline{12v} \quad \overline{14v} \quad \overline{16}$$



# LETTERS FOR NUMBERS! (OR ABC TO 123)

IF A MEAL COSTS \$10 THEN 2 MEALS COST \$ \_\_\_\_\_

IF A BUN COSTS \$1 AND A DRINK COSTS \$2, THEN...

... 5 BUNS & 4 DRINKS COST \$ \_\_\_\_\_

$$5b + 4d = 5(\underline{\quad}) + 4(\underline{\quad}) = \underline{\quad}$$

WHEN WE REPLACE LETTERS BY NUMBERS, WE ARE

NOW, GIVEN  $v = 2$ ,  $e = 3$ ,  $x = 5$ ,  
FIND THE VALUE OF 

$$v + e = \underline{\quad} \quad e + x = \underline{\quad}$$

$$x + v = \underline{\quad} \quad v + v + v = \underline{\quad}$$

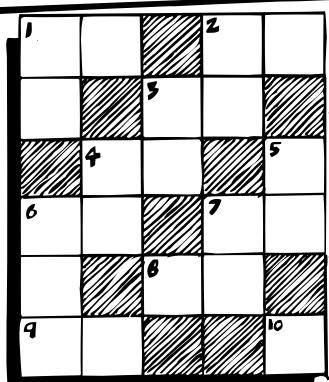
$$2v = \underline{\quad} \quad 3e = \underline{\quad}$$

$$5x = \underline{\quad} \quad 8v + 1 = \underline{\quad}$$

$$4e + 7 = \underline{\quad} \quad 2x + 5 = \underline{\quad}$$

$$3v - 1 = \underline{\quad} \quad 6e - 10 = \underline{\quad}$$

## CROSS NUMBER



### ACROSS

$$1, 5v$$

$$2, 3x + 2$$

$$3, 8e$$

$$4, 6x + 4$$

$$5, 4e + 2$$

$$6, 5e + 3x$$

$$7, 10x - 6$$

$$8, 4v + 7$$

### DOWN

$$1, 5v + 3$$

$$2, 3x - 1$$

$$3, 10v$$

$$4, 50e + 1$$

$$5, 12v + 2x$$

$$6, 6v - 4e$$

FINALLY, GIVEN  $s = 1$ ,  $p = 4$ ,  $y = 10$ , EVALUATE:

$$3s + p = \underline{\quad} \quad 2y - p = \underline{\quad} \quad 6s + 5p = \underline{\quad}$$

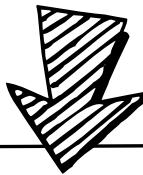
$$2p + 3y = \underline{\quad} \quad 2s + 2y = \underline{\quad} \quad 3y - 7s = \underline{\quad}$$

$$4s + 4y = \underline{\quad} \quad 4p + y = \underline{\quad} \quad 3p - y = \underline{\quad}$$

$$\frac{5p}{2} = \underline{\quad} \quad \frac{3+s}{5} = \underline{\quad} \quad \frac{3y}{5} = \underline{\quad}$$

# -QUICK KIWI CHAT

GIVEN  $P=4$     $Q=5$     $R=6$   
AND THESE CLUES . . .



$$\begin{aligned} A &= P - 3 \\ G &= 2R - Q \\ M &= 2Q - 6 \\ R &= P + R \\ V &= Q(P+R) \end{aligned}$$

$$\begin{aligned} B &= R - P \\ I &= Q + 3 \\ N &= 11 - R \\ S &= PQ \\ H &= Q + R \end{aligned}$$

$$\begin{aligned} E &= R \div 2 \\ L &= 2P + 1 \\ O &= 3R - 12 \\ T &= QR \end{aligned}$$

. . . FIND THE Q.K. MESSAGE

9   3   1   10   5   8   5   7

9   3   30   30   3   10   20

20   50   10   3

7   3   30   20

30   11   3

20   50   4

2   3   1   30



# WHIZZ-KIDS WORKSHEET!



## NIFTY NUMBERS

$$\begin{array}{rcl} 7 + 8 = \underline{\quad} \\ 9 - 1 = \underline{\quad} \\ 8 \times 6 = \underline{\quad} \\ 9 \div 3 = \underline{\quad} \\ 6 + 5 = \underline{\quad} \\ 5 - 2 = \underline{\quad} \\ 4 \times 7 = \underline{\quad} \\ 7 \div 1 = \underline{\quad} \\ 3 + 9 = \underline{\quad} \\ 9 + 9 = \underline{\quad} \end{array}$$

## DANDY DECIMALS

$$\begin{array}{rcl} 0.4 + 0.1 = \underline{\quad} \\ 0.3 + 0.3 = \underline{\quad} \\ 0.4 - 0.1 = \underline{\quad} \\ 0.3 - 0.3 = \underline{\quad} \\ 1.2 + 0.7 = \underline{\quad} \\ 1.8 - 0.7 = \underline{\quad} \\ 3 \times 0.2 = \underline{\quad} \\ 2 \times 0.4 = \underline{\quad} \\ \frac{0.6}{2} = \underline{\quad} \quad \frac{1.2}{2} = \underline{\quad} \end{array}$$

## RADICAL ROMANS

$$\begin{array}{rcl} III = \underline{\quad} \\ V = \underline{\quad} \\ VII = \underline{\quad} \\ X = \underline{\quad} \\ XI = \underline{\quad} \\ \underline{\quad} = 2 \\ \underline{\quad} = 4 \\ \underline{\quad} = 8 \\ \underline{\quad} = 12 \\ \underline{\quad} = 20 \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{rcl} 123 + 200 = \underline{\quad} \\ 300 + 300 = \underline{\quad} \\ 200 - 185 = \underline{\quad} \\ 300 - 140 = \underline{\quad} \\ 40 \times 5 = \underline{\quad} \\ 90 \times 10 = \underline{\quad} \\ 50 \div 5 = \underline{\quad} \\ 1200 \div 10 = \underline{\quad} \\ 333 + 222 = \underline{\quad} \\ 543 - 345 = \underline{\quad} \end{array}$$

## THE QUINTUS QUIZ

I LEFT HOME AT \_\_\_\_\_  
 IT TOOK \_\_\_\_\_ MINUTES TO  
 GET TO SCHOOL. SCHOOL WENT  
 FOR \_\_\_\_\_ HOURS. SUPPER  
 WAS AT \_\_\_\_\_ TODAY. I WAS  
 OUT OF BED FOR \_\_\_\_\_ HOURS.

- MONDAY -	
OUT OF BED	6.00 a.m.
LEFT HOME	8.00
GOT TO SCHOOL	9.00
SCHOOL FINISHED	3.00
ARRIVED HOME	4.00
SUPPERTIME	8.30
INTO MY BED	9.00

NUMBER OF MISTAKES \_\_\_\_\_





$13 + 18 = \underline{\hspace{2cm}}$

$25 + 61 = \underline{\hspace{2cm}}$

$1018 + 0 = \underline{\hspace{2cm}}$

$13 + 0 = \underline{\hspace{2cm}}$

$0 + 25 = \underline{\hspace{2cm}}$

$0 + 118 = \underline{\hspace{2cm}}$

$752 + 0 = \underline{\hspace{2cm}}$

$19164 + 0 = \underline{\hspace{2cm}}$

$0 + 999 = \underline{\hspace{2cm}}$

$0 + 23456 = \underline{\hspace{2cm}}$

"A NUMBER \_\_\_\_\_ WHEN ADDED TO ZERO"

$6 - 4 = \underline{\hspace{2cm}}$

$15 - 8 = \underline{\hspace{2cm}}$

$406 \times 0 = \underline{\hspace{2cm}}$

$6 - 0 = \underline{\hspace{2cm}}$

$15 - 0 = \underline{\hspace{2cm}}$

$0 \times 51 = \underline{\hspace{2cm}}$

$194 - 0 = \underline{\hspace{2cm}}$

$2013 - 0 = \underline{\hspace{2cm}}$

$0 \times 0.2 = \underline{\hspace{2cm}}$

$8 \times 9 = \underline{\hspace{2cm}}$

$12 \times 11 = \underline{\hspace{2cm}}$

$2085 \times 0 = \underline{\hspace{2cm}}$

$8 \times 0 = \underline{\hspace{2cm}}$

$12 \times 0 = \underline{\hspace{2cm}}$

$0 \times 345 = \underline{\hspace{2cm}}$

$32 \times 0 = \underline{\hspace{2cm}}$

$167 \times 0 = \underline{\hspace{2cm}}$

$0 \times 9.03 = \underline{\hspace{2cm}}$

"ANY NUMBER MULTIPLIED BY ZERO \_\_\_\_\_"

-AND NOW FOR...  
..ZELDA'S NAUGHTY WEE PUZZLE!

**A**  $9 - 5 \times 0$

**N**  $12 - 5 + 0 \times 3$

**G**  $0 + 4 \times 2$

**T**  $5 - 0 + 3 + 0 - 4$

**H**  $0 \times 10 + 2$

**U**  $9 + 2 \times 0 + 3 - 2$

**I**  $20 + 0 - 14 - 0$

**Y**  $6 \times 5 \times 0 \times 4$

**O**  $2 + 0 + 3$

**R**  $32 \div 4 \div 8$

"  
 $\overline{7} \ \overline{10} \ \overline{4} \ \overline{4} \ \overline{0}$      $\overline{7} \ \overline{5} \ \overline{4} \ \overline{2} \ \overline{6} \ \overline{7} \ \overline{8}$      $\overline{4} \ \overline{10} \ \overline{1} \ \overline{7}$  **S**

$\overline{6} \ \overline{7} \ \overline{4} \ \overline{5}$      $\overline{7} \ \overline{9} \ \overline{10} \ \overline{8} \ \overline{2} \ \overline{4} \ \overline{0}$      $\overline{7} \ \overline{5} \ \overline{10} \ \overline{8} \ \overline{2} \ \overline{4}$  !"

-Oh La La! -

-HEY ZELDA,  
HAVE YOU GOT SOME  
NUMBER PUZZLES  
FOR US?

OUI OUI!  
START BY  
COMPLETING  
THE SUMS BELOW  
TO MAKE THEM EQUAL 15



$27 - \underline{\quad} \quad 15 - \underline{\quad} \quad 30 \div \underline{\quad}$

$9 + \underline{\quad} \quad 5 \times \underline{\quad} \quad 7 + \underline{\quad} \quad 60 - \underline{\quad}$

$3 + \underline{\quad} \quad 22 - \underline{\quad} \quad 13 + \underline{\quad} \quad 2 \times 3 + \underline{\quad}$

$2 \times 4 + \underline{\quad} \quad 25 - 2 \times \underline{\quad} \quad 5 \times 8 - \underline{\quad} \quad 4^2 - \underline{\quad}$

-NOW PAIR THE SUMS BELOW THAT EQUAL  
THE SAME NUMBER!

$6 + 8$	○
$12 - 4$	○
$15 \div 5$	○
$12 \times 4$	○
$(29 - 7) \div 11$	○

○	$(9 + 11) \div 10$
○	$16 - 13$
○	$64 \div 8$
○	$28 \div 2$
○	$6 \times 8$

-NEXT, UNDERLINE  
THE SUMS THAT EQUAL 12  
& CIRCLE THOSE THAT EQUAL 9.

$8 + 4$	$63 \div 7$	$\frac{1}{2} \text{ OF } 8 \times 3$	$(18 + 6) \div 2$	$9 + 3$
$57 - 45$	$4 \times 3$	$18 - 6$	$8 + 0$	$54 - 45$
$5 + 4$	$9 - 9$	$27 \div 3$	$60 \div 5$	$(17 + 5) - 12$

-HOW MANY DIFFERENT NUMBERS CAN YOU  
MAKE USING ONLY THE NUMBER 4 FOUR TIMES!

$4 \div 4 + 4 - 4 = 1$  \_\_\_\_\_

$(4 \times 4) + (4 \times 4) = 32$  \_\_\_\_\_

$4 - 4 + 4 \times 4 = 16$  \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# SOLVING is THE BEST SOLUTION

AN EQUATION is \_\_\_\_\_

EXERCISE EASY:

$p+8=9$	$p=$ _____	$2+a=6$	$a=$ _____	$t+5=10$	$t=$ _____
$q+7=10$	$q=$ _____	$z+4=12$	$z=$ _____	$n+9=12$	$n=$ _____
$3+b=4$	$b=$ _____	$x+2=8$	$x=$ _____	$e-2=1$	$e=$ _____
$c-2=4$	$c=$ _____	$k-1=6$	$k=$ _____	$r-6=2$	$r=$ _____
$6-3=d$	$d=$ _____	$m-1=4$	$m=$ _____	$v-1=19$	$v=$ _____

EXERCISE EXCITED:

$2a=10$	$a=$ _____	$\frac{1}{2}=8$	$n=$ _____
$4b=40$	$b=$ _____	$\frac{p}{3}=10$	$p=$ _____
$6c=18$	$c=$ _____	$\frac{r}{4}=6$	$r=$ _____
$3d=24$	$d=$ _____	$\frac{s}{5}=12$	$s=$ _____
$5e=30$	$e=$ _____	$\frac{t}{9}=4$	$t=$ _____
$7f=49$	$f=$ _____	$\frac{u}{10}=1$	$u=$ _____
$8g=88$	$g=$ _____		
$10h=200$	$h=$ _____		
$9i=9$	$i=$ _____		



SUZY  
SOLVER

WHY WOULD YOU NEVER GO HUNGRY  
IN THE DESERT?

- SOLVE THE EQUATIONS TO FIND OUT ...

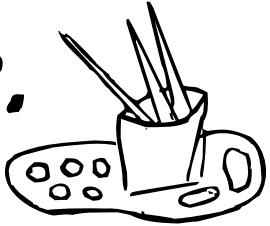
$b+13=16$	$16+c=23$	$5 \times d=20$
$21-f=20$	$29-n=27$	$r-4=9$
$12 \times t=60$	$88 \div w=8$	$48 \div h=4$
$17+s=23$	$18+u=33$	$0+13=29$
$e-4=5$	$9 \times i=72$	$930-a=920$

$\overline{3} \quad \overline{9} \quad \overline{7} \quad \overline{10} \quad \overline{15} \quad \overline{6} \quad \overline{9}$        $\overline{16} \quad \overline{1} \quad \overline{5} \quad \overline{12} \quad \overline{9}$

$\overline{6} \quad \overline{10} \quad \overline{2} \quad \overline{4}$        $\overline{11} \quad \overline{12} \quad \overline{8} \quad \overline{7} \quad \overline{12}$        $\overline{8} \quad \overline{6}$        $\overline{5} \quad \overline{12} \quad \overline{9} \quad \overline{13} \quad \overline{9}$

# PRINT THE POSTERBOARDS.

EXERCISE EXTENDED:



$y - 3 = 9$	$y =$
$b + 11 = 20$	$b =$
$15 - m = 3$	$m =$
$23 - d = 8$	$d =$
$t \times t = 100$	$t =$
$w \div 3 = 9$	$w =$
$g + g = 16$	$g =$
$r - 7 = 8$	$r =$
$12 - p = 10$	$p =$
$q + 19 = 42$	$q =$

$x - 24 = 40$	$x =$
$\frac{1}{2}n = 16$	$n =$
$5s + 1 = 6$	$s =$
$3e + 4 = 10$	$e =$
$2h + 9 = 15$	$h =$
$4k + 1 = 17$	$k =$
$3f - 2 = 10$	$f =$
$4a + 2 = 22$	$a =$
$12v + 3 = 51$	$v =$
$5c + 4 = 39$	$c =$

SOLVE ANY EQUATION, AND

- WRITE THE LETTER ABOVE THE CORRECT  
ANSWER ON THE BOARD.

$$20 + 45 + V = 99$$

$$78 + 35 + T = 157$$

$$A + 69 + 89 = 209$$

$$U + 98 + 26 = 215$$

$$100 + P + 200 = 355$$

$$215 + S + 308 = 587$$

$$502 + 199 + F = 740$$

$$R + 226 + 372 = 634$$

$$5Q = 95$$

$$3G = 48$$

$$2I = 74$$

$$4N = 184$$

$$9O = 882$$

$$8E = 376$$

$$7L = 434$$

$$6W = 294$$

$$10B + 18 = 148$$

$$\overline{64} \ \overline{98} \ \overline{98} \ \overline{46}$$

$$\overline{16} \ \overline{98} \ \overline{44}$$

$$\overline{37} \ \overline{64}$$

$$\overline{64} \ \overline{98} \ \overline{98} \ \overline{46}$$

$$\overline{16} \ \overline{98} \ \overline{46} \ \overline{47}$$

$$\overline{64} \ \overline{98} \ \overline{98} \ \overline{46}$$

$$\overline{36} \ \overline{37} \ \overline{55} \ \overline{47}$$

$$\overline{64} \ \overline{98} \ \overline{98} \ \overline{46}$$

$$\overline{36} \ \overline{98} \ \overline{44} \ \overline{44} \ \overline{47} \ \overline{46}$$

$$\overline{13} \ \overline{91} \ \overline{44}$$

$$\overline{47} \ \overline{19} \ \overline{91} \ \overline{51} \ \overline{44} \ \overline{37} \ \overline{98} \ \overline{46} \ \overline{64}$$

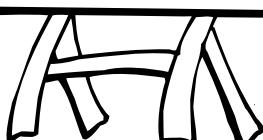
$$\overline{49} \ \overline{47} \ \overline{62} \ \overline{62}$$

$$\overline{62} \ \overline{47} \ \overline{51} \ \overline{36} \ \overline{46} \ \overline{44}$$

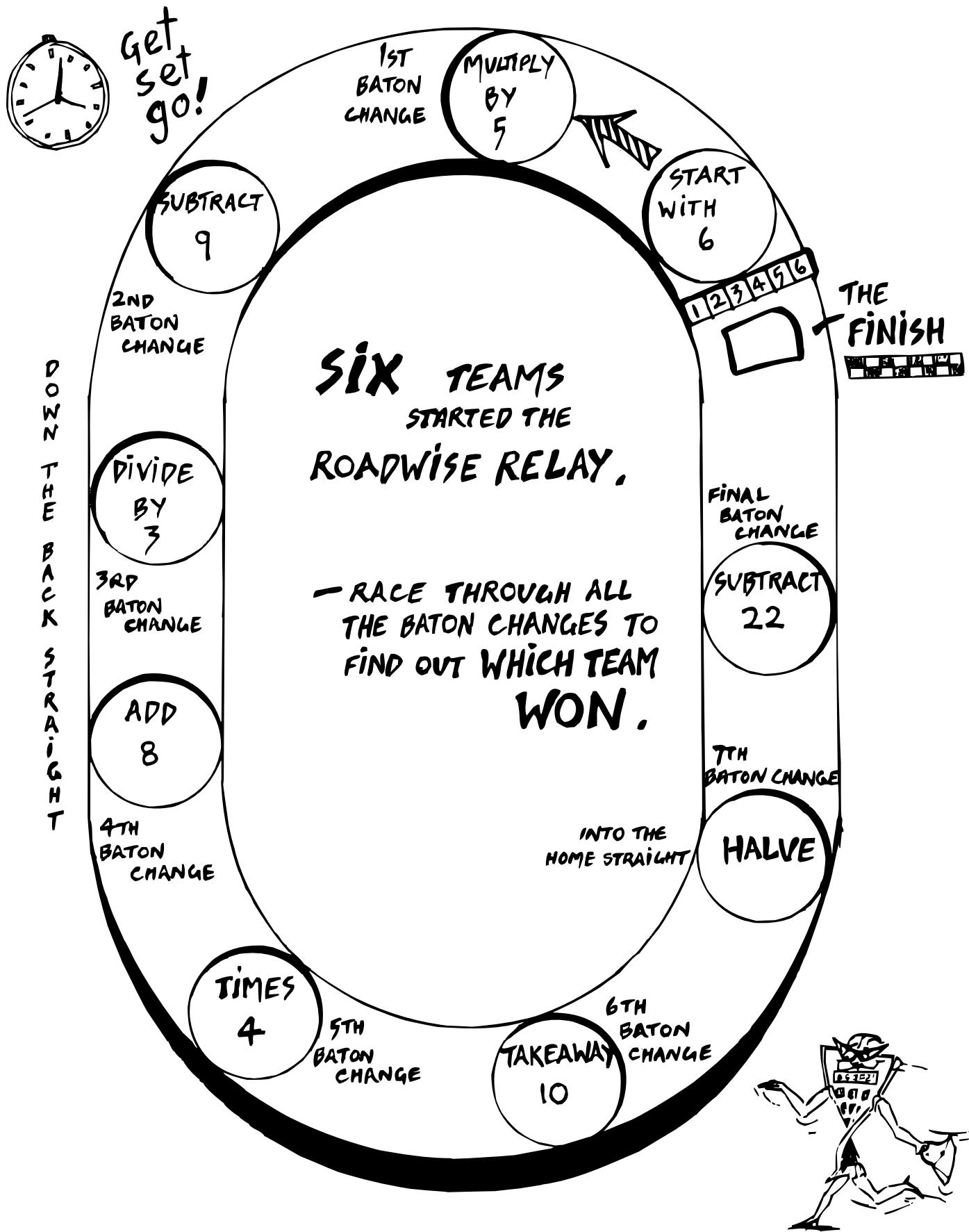
$$\overline{71} \ \overline{36} \ \overline{47}$$

$$\overline{46} \ \overline{47} \ \overline{34} \ \overline{47} \ \overline{36}$$

$$\overline{39} \ \overline{98} \ \overline{36} \ \overline{16} \ \overline{98} \ \overline{44} \ \overline{44} \ \overline{47} \ \overline{46}$$



# THE "ROADWISE RELAY"



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{rcl} 2 + 3 = & \underline{\hspace{2cm}} \\ 5 - 1 = & \underline{\hspace{2cm}} \\ 3 \times 4 = & \underline{\hspace{2cm}} \\ 8 \div 2 = & \underline{\hspace{2cm}} \\ 4 + 9 = & \underline{\hspace{2cm}} \\ 9 - 5 = & \underline{\hspace{2cm}} \\ 6 \times 6 = & \underline{\hspace{2cm}} \\ 5 \div 1 = & \underline{\hspace{2cm}} \\ 7 + 8 = & \underline{\hspace{2cm}} \\ 9 + 4 = & \underline{\hspace{2cm}} \end{array}$$

**3**

## VISCOUS VARIABLES

$$\begin{array}{rcl} a + a = & \underline{\hspace{2cm}} \\ b + b = & \underline{\hspace{2cm}} \\ 2c + c = & \underline{\hspace{2cm}} \\ 2d + 2d = & \underline{\hspace{2cm}} \\ 4e + 3e = & \underline{\hspace{2cm}} \\ f - f = & \underline{\hspace{2cm}} \\ 2g - g = & \underline{\hspace{2cm}} \\ 4h - h = & \underline{\hspace{2cm}} \\ 3i - 2i = & \underline{\hspace{2cm}} \\ j + j + j = & \underline{\hspace{2cm}} \end{array}$$

## MONEY MIXTURES

$$\begin{array}{rcl} 10c + 10c = & \underline{\hspace{2cm}} \\ 20c - 10c = & \underline{\hspace{2cm}} \\ 2 \times 15c = & \underline{\hspace{2cm}} \\ 5 \times 20c = & \underline{\hspace{2cm}} \\ 20c + 20c = & \underline{\hspace{2cm}} \\ 50c - 20c = & \underline{\hspace{2cm}} \\ \$6 + \$5 = & \underline{\hspace{2cm}} \\ \$8 - \$7 = & \underline{\hspace{2cm}} \\ \$10 \times 8 = & \underline{\hspace{2cm}} \\ \$10 \div 5 = & \underline{\hspace{2cm}} \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{rcl} 100 + 123 = & \underline{\hspace{2cm}} \\ 200 + 300 = & \underline{\hspace{2cm}} \\ 100 - 85 = & \underline{\hspace{2cm}} \\ 200 - 160 = & \underline{\hspace{2cm}} \\ 50 \times 7 = & \underline{\hspace{2cm}} \\ 80 \times 10 = & \underline{\hspace{2cm}} \\ 30 \div 3 = & \underline{\hspace{2cm}} \\ 60 \div 10 = & \underline{\hspace{2cm}} \\ 111 + 111 = & \underline{\hspace{2cm}} \\ 234 - 134 = & \underline{\hspace{2cm}} \end{array}$$

## THE QUINTUS QUIZ

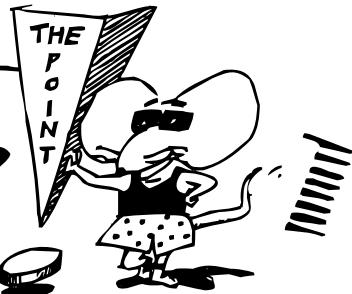
- HOW MANY DAYS IN FEBRUARY? \_\_\_\_\_
- WHAT DAY IS MARCH 12TH? \_\_\_\_\_
- WHAT DATE IS THE SECOND THURSDAY OF MARCH? \_\_\_\_\_
- WHAT DATE IS THE FOURTH MONDAY OF FEBRUARY? \_\_\_\_\_
- HOW MANY FRIDAYS IN MARCH? \_\_\_\_\_

FEBRUARY						
M	T	W	T	F	S	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

MARCH						
M	T	W	T	F	S	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NUMBER OF MISTAKES \_\_\_\_\_

# LET'S GET TO A POINT WITH DAVE!!



## -DAVE'S EXCELLENT DECIMAL ADDITION!

$$\begin{array}{r} 0.1 \\ + 0.1 \\ \hline \end{array} \quad \begin{array}{r} 0.1 \\ + 0.3 \\ \hline \end{array} \quad \begin{array}{r} 0.6 \\ + 0.2 \\ \hline \end{array} \quad \begin{array}{r} 0.5 \\ + 0.5 \\ \hline \end{array} \quad \begin{array}{r} 1.2 \\ + 2.3 \\ \hline \end{array}$$

$$\begin{array}{r} 4.1 \\ + 3.6 \\ \hline \end{array} \quad \begin{array}{r} 3.5 \\ + 2.2 \\ \hline \end{array} \quad \begin{array}{r} 4.15 \\ + 3.64 \\ \hline \end{array} \quad \begin{array}{r} 5.61 \\ + 2.08 \\ \hline \end{array} \quad \begin{array}{r} 4.68 \\ + 5.12 \\ \hline \end{array}$$

$$\begin{array}{r} 3.2 \\ + 3.4 \\ \hline \end{array} \quad \begin{array}{r} 5.3 \\ + 4.5 \\ \hline \end{array} \quad \begin{array}{r} 1.14 \\ + 2.12 \\ \hline \end{array} \quad \begin{array}{r} 2.06 \\ + 5.13 \\ \hline \end{array} \quad \begin{array}{r} 2.25 \\ + 6.35 \\ \hline \end{array}$$

## -DAVE'S DISTINGUISHED DECIMAL SUBTRACTION!

$$\begin{array}{r} 0.3 \\ - 0.1 \\ \hline \end{array} \quad \begin{array}{r} 0.9 \\ - 0.6 \\ \hline \end{array} \quad \begin{array}{r} 0.8 \\ - 0.7 \\ \hline \end{array} \quad \begin{array}{r} 3.8 \\ - 2.6 \\ \hline \end{array} \quad \begin{array}{r} 9.8 \\ - 5.4 \\ \hline \end{array}$$

$$\begin{array}{r} 0.87 \\ - 0.42 \\ \hline \end{array} \quad \begin{array}{r} 0.77 \\ - 0.15 \\ \hline \end{array} \quad \begin{array}{r} 0.83 \\ - 0.51 \\ \hline \end{array} \quad \begin{array}{r} 2.57 \\ - 1.41 \\ \hline \end{array} \quad \begin{array}{r} 4.68 \\ - 3.41 \\ \hline \end{array}$$

$$\begin{array}{r} 6.53 \\ - 3.53 \\ \hline \end{array} \quad \begin{array}{r} 7.4 \\ - 0.4 \\ \hline \end{array} \quad \begin{array}{r} 6.5 \\ - 0.9 \\ \hline \end{array} \quad \begin{array}{r} 8.2 \\ - 0.6 \\ \hline \end{array} \quad \begin{array}{r} 10.6 \\ - 2.7 \\ \hline \end{array}$$

SOME POINTED OBJECTS!

A	$0.2 + 0.1$
P	$0.2 - 0.1$
N	$0.65 + 0.33$
L	$0.65 - 0.33$

C	$0.14 + 0.26$	$\frac{1}{3}$	$\overline{2} \overline{1} \overline{6} \overline{3} \overline{9} \overline{6}$
E	$0.4 + 0.2$	$\frac{1}{3}$	$\overline{1} \overline{7} \overline{8} \overline{9} \overline{8}$
S	$0.4 - 0.2$	$\frac{1}{3}$	$\overline{1} \overline{7} \overline{8} \overline{9} \overline{8}$
R	$0.87 + 0.09$	$\frac{1}{3}$	$\overline{1} \overline{3} \overline{2} \overline{3} \overline{2} \overline{2}$
I	$0.87 - 0.09$	$\frac{1}{3}$	$\overline{1} \overline{8} \overline{6} \overline{2} \overline{0}$
T	$0.48 + 0.32$	$\frac{1}{3}$	$\overline{1} \overline{8} \overline{3} \overline{7} \overline{8} \overline{3} \overline{2}$

# - DAVE'S DECIMALS -



$$\begin{array}{r} 0.23 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 0.72 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 0.63 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 0.91 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 0.82 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 0.16 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 0.76 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 0.99 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 0.49 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 0.53 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7.13 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4.21 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2.98 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3.68 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2.34 \\ \times 9 \\ \hline \end{array}$$

- WHAT DID THE DOG SAY WHEN IT SAT ON THE SANDPAPER?

X	4	.1	.02	.06	.9	8	.6	.3	.05
3	12	.3	.06	.18	2.7	24	1.8	.9	.15
.2	.8	.06	.04	.012	.18	1.6	12	.5	.7
.4	16	.04	.008	.024	3.6	32	24	.12	.02
.8	3.6	.08	.1	.048	.7	6.4	.5	.26	.04
.5	.4	.05	1	.03	4.5	4	.03	.15	.025
6	30	.6	12	.36	5.5	48	3.8	1.8	.3
2	1.2	.2	.4	.12	1.1	16	.8	.6	.1
.9	38	.09	1.8	54	8.1	7.2	5.4	.27	4.5

SHADE IN ALL  
THE MISTAKES TO  
FIND OUT!  
(YOU SHOULD FIND  
30 MISTAKES)



# — TONNES OF TENS —

$$8.04 \times 10 =$$

$$0.84 \times 10 =$$

$$8.914 \times 100 =$$

$$0.894 \times 100 =$$

$$0.8 \times 100 =$$

$$9.765 \times 1000 =$$

$$0.97 \times 1000 =$$

$$8.04 \div 10 =$$

$$804 \div 10 =$$

$$0.84 \div 10 =$$

$$79.1 \div 100 =$$

$$7901 \div 100 =$$

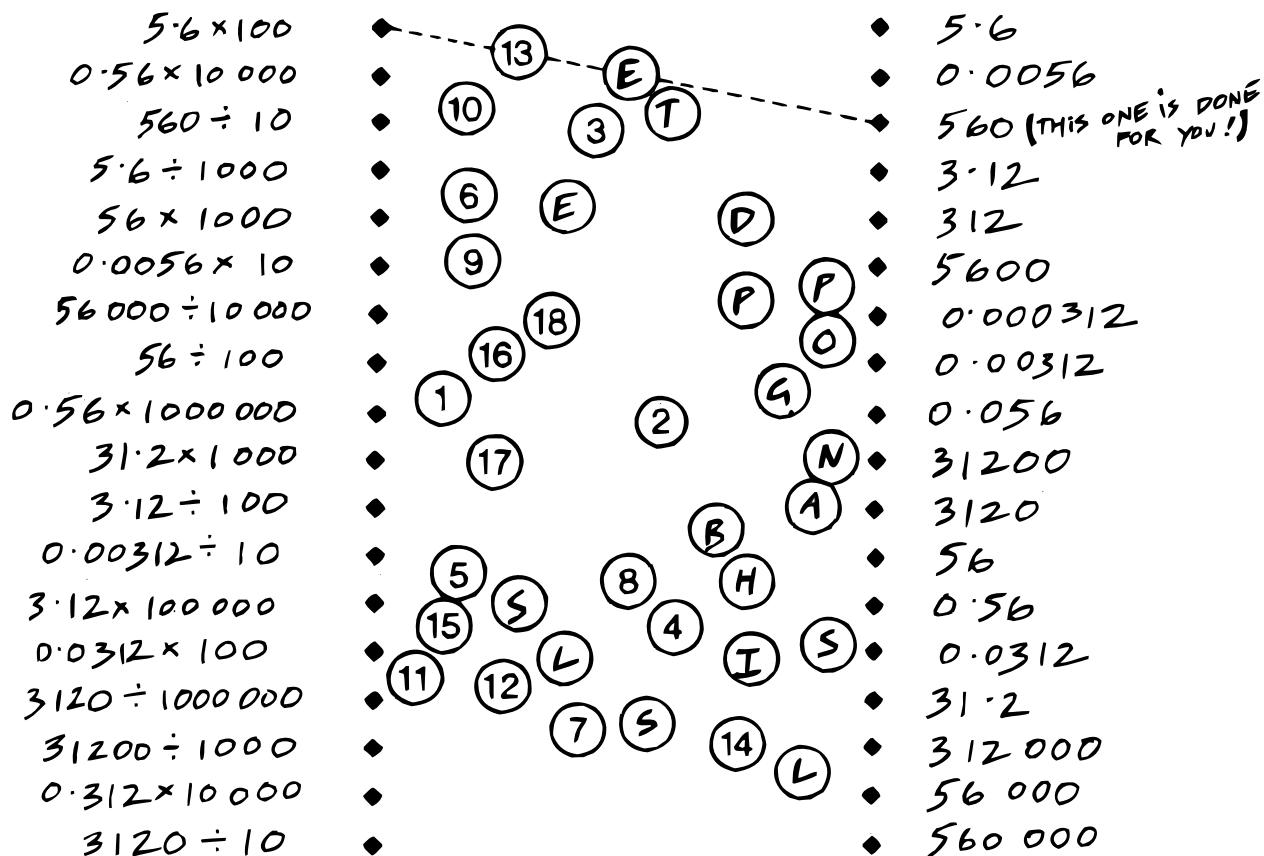
$$980.1 \div 1000 =$$

$$9088 \div 1000 =$$

$$0.7 \div 1000 =$$

**WHY WERE THE STUDENT AND THE WITCH SMILING?**

LINE UP EACH SUM WITH ITS CORRECT SOLUTION TO FIND THE ANSWER!



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----

Did you?

NOW WRITE THESE NUMBERS USING WORDS.

560 \_\_\_\_\_

3124 \_\_\_\_\_

87.9 \_\_\_\_\_

7002.8 \_\_\_\_\_

# -DAVE'S DECIMAL ALL-SORTS DO-DA-CRAZY-DECIMAL DUDES!



$$\begin{array}{r}
 2.06 \\
 + 7.18 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 1.87 \\
 + 0.59 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 9.58 \\
 + 7.69 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 8.72 \\
 - 3.14 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 16.85 \\
 - 11.58 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 3.5 \\
 \times 2 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 5.3 \\
 \times 2 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 4.2 \\
 \times 3 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 2.4 \\
 \times 5 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 1.6 \\
 \times 5 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 4 \sqrt{8.48} \\
 6 \sqrt{6.72} \\
 8 \sqrt{10.56} \\
 10 \sqrt{39.7} \\
 12 \sqrt{26.472} \\
 \end{array}$$

$$\begin{array}{r}
 25.6 \\
 - 17.4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 43.8 \\
 - 27.9 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 39.7 \\
 - 32.8 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 93.25 \\
 + 58.89 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 75.64 \\
 + 38.36 \\
 \hline
 \end{array}$$

NOW DO THESE SUMS TO DISCOVER A  
FAMOUS DECIMAL YEAR IN N.Z.!

<b>Y</b>	$\$0.83$	<b>V</b>	$\$1.38$	<b>I</b>	$\$2.75$	<b>X</b>	$\$3.41$
	$+ 0.67$		$+ 0.62$		$- 1.35$		$- 2.76$
	<hr/>		<hr/>		<hr/>		<hr/>

<b>S</b>	$\$0.32$	<b>T</b>	$\$1.25$	<b>E</b>	$7 \sqrt{\$2.80}$	<b>N</b>	$6 \sqrt{\$10.80}$
	$\times 5$		$\times 4$				
	<hr/>		<hr/>				<hr/>

1.8 1.4 1.8 4 5 4 4 1.8    1.6 1.4 1.65 5 1.5    1.6 1.4 2 4 1.8

(WHY WAS IT SO IMPORTANT?)

# DAVE'S DANGEROUS DECIMALS

DAVE SUGGESTS YOU USE A CALCULATOR

$$\begin{array}{r} 3619.57 \\ + 1248.68 \\ \hline \end{array}$$

$$\begin{array}{r} 3594.07 \\ + 1483.56 \\ \hline \end{array}$$

$$\begin{array}{r} 510.234 \\ + 667.981 \\ \hline \end{array}$$

$$\begin{array}{r} 148.675 \\ + 728.149 \\ \hline \end{array}$$

$$1959.63 + 812.54 + 70.26 + 3.19 = \underline{\hspace{2cm}}$$

$$\begin{array}{r} 42.65 \\ - 21.88 \\ \hline \end{array}$$

$$\begin{array}{r} 951.34 \\ - 240.25 \\ \hline \end{array}$$

$$\begin{array}{r} 73.589 \\ - 14.983 \\ \hline \end{array}$$

$$\begin{array}{r} 6.050 \\ - 1.123 \\ \hline \end{array}$$

$$1959.63 - 812.54 - 70.26 - 3.19 = \underline{\hspace{2cm}}$$

$$13) \overline{39.52} \quad 20) \overline{86.420} \quad 0.6) \overline{2.46} \quad 1.5) \overline{607.65}$$

## WHAT'S HAPPENED TO DAVE NOW?

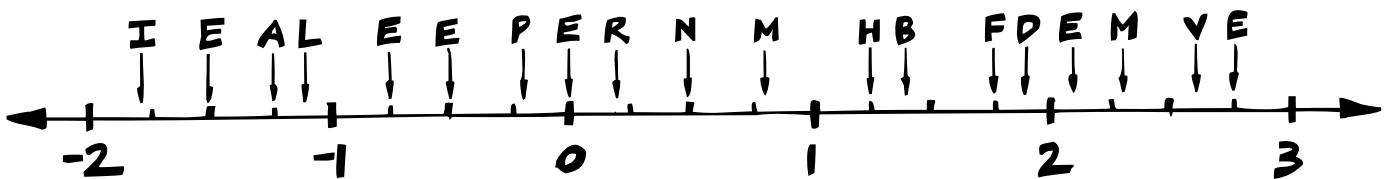


"

$$\begin{array}{r}
 1.25 \ 2.75 \ 7.1 \ 0.2 \ 2.3 \ 0.75 \\
 -1.8 \ 2.6 \ 0 \ 1.4 \ 2.1 \ 1.5 \ 0.5 \\
 \hline
 1.75 \ 0.2 \ -1.25 \ 0.8 \ -0.5 \ 1.9
 \end{array}$$

"

-HERE DWELLS DASTARDLY  
DAVE DECIMAL, DOBBED IN FOR  
DAMAGING CLASSIFIED DECIMALS.



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{l} 4 + 5 = \underline{\hspace{2cm}} \\ 6 - 1 = \underline{\hspace{2cm}} \\ 5 \times 4 = \underline{\hspace{2cm}} \\ 3 \div 1 = \underline{\hspace{2cm}} \\ 6 + 2 = \underline{\hspace{2cm}} \\ 7 - 5 = \underline{\hspace{2cm}} \\ 3 \times 3 = \underline{\hspace{2cm}} \\ 8 \div 4 = \underline{\hspace{2cm}} \\ 5 + 5 = \underline{\hspace{2cm}} \\ 7 + 6 = \underline{\hspace{2cm}} \end{array}$$

## TRENDY TABLES

$$\begin{array}{l} 2 \times 1 = \underline{\hspace{2cm}} \\ 2 \times 2 = \underline{\hspace{2cm}} \\ 2 \times 3 = \underline{\hspace{2cm}} \\ 2 \times \underline{\hspace{1cm}} = 10 \\ 2 \times \underline{\hspace{1cm}} = 14 \\ 2 \times \underline{\hspace{1cm}} = 12 \\ 2 \times 9 = \underline{\hspace{2cm}} \\ 2 \times 10 = \underline{\hspace{2cm}} \\ 2 \times \underline{\hspace{1cm}} = 26 \\ 2 \times \underline{\hspace{1cm}} = 24 \end{array}$$



## SOFT SUBSTITUTES

$$\begin{array}{l} a = 3, a + 5 = \underline{\hspace{2cm}} \\ b = 4, b + 12 = \underline{\hspace{2cm}} \\ c = 8, c - 1 = \underline{\hspace{2cm}} \\ d = 7, d - 3 = \underline{\hspace{2cm}} \\ e = 5, 4 + e = \underline{\hspace{2cm}} \\ f = 2, 9 - f = \underline{\hspace{2cm}} \\ g = 6, 3g = \underline{\hspace{2cm}} \\ h = 9, 4h = \underline{\hspace{2cm}} \\ i = 1, 10i = \underline{\hspace{2cm}} \\ j = 10, 5j = \underline{\hspace{2cm}} \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{l} 6 \text{ ADDED TO } 27 \text{ IS } \underline{\hspace{2cm}} \\ 3 \text{ TIMES } 18 \text{ IS } \underline{\hspace{2cm}} \\ \$4.50 + \$6.25 = \underline{\hspace{2cm}} \\ \$5.80 + \$7.80 = \underline{\hspace{2cm}} \\ 462 = 400 + \underline{\hspace{2cm}} + 2 \\ 500 + 20 + 6 = \underline{\hspace{2cm}} \\ 210 + 123 = \underline{\hspace{2cm}} \\ 157 + 225 = \underline{\hspace{2cm}} \\ 240 - 130 = \underline{\hspace{2cm}} \\ 188 - 66 = \underline{\hspace{2cm}} \end{array}$$

## THE QUINTUS QUIZ

- FIND THE COST FOR...

$$\begin{array}{l} 2 \text{ PARENTS ONLY } \underline{\hspace{2cm}} \\ 1 \text{ PARENT & 1 CHILD } \underline{\hspace{2cm}} \\ 2 \text{ PARENTS & 2 CHILDREN } \underline{\hspace{2cm}} \\ 1 \text{ PARENT & 3 CHILDREN } \underline{\hspace{2cm}} \\ 4 \text{ PARENTS & 2 CHILDREN } \underline{\hspace{2cm}} \end{array}$$



NUMBER OF MISTAKES

# MONEY MATHS

$\$0.38$	$\$0.94$	$\$0.75$	$\$0.92$	$\$0.44$
$+ 0.12$	$+ 0.46$	$+ 0.15$	$- 0.07$	$- 0.29$
_____	_____	_____	_____	_____
$\$2.76$	$\$1.79$	$\$4.36$	$\$7.10$	$\$8.26$
$+ 2.34$	$+ 0.81$	$- 2.41$	$- 5.35$	$- 1.96$
_____	_____	_____	_____	_____

## - FIND THE COST OF :

4 MATS AT \$7.25 EACH \_\_\_\_\_      2 COTS AT \$82.95 EACH \_\_\_\_\_  
 6 HATS AT \$15.40 EACH \_\_\_\_\_      900 DOTS AT 30¢ EACH \_\_\_\_\_  
 10 RATS AT \$1.65 EACH \_\_\_\_\_      8 LOTS AT \$54.20 EACH \_\_\_\_\_  
 3 BATS AT \$98.90 EACH \_\_\_\_\_      5 POTS AT \$48.50 EACH \_\_\_\_\_

## - HOW MUCH CHANGE FROM :

\$10 WHEN YOU SPEND \$6.80 \_\_\_\_\_  
 \$10 WHEN YOU BUY 2 PENS AT \$1.35 EACH \_\_\_\_\_  
 \$20 WHEN YOU SPEND \$11.30 \_\_\_\_\_  
 \$20 WHEN YOU BUY 5 DISCS AT \$2.75 EACH \_\_\_\_\_  
 \$50 WHEN YOU BUY 3 BOOKS AT \$1.40, \$1.60, \$1.80, 3 COVERS  
 AT 70¢ EACH AND 4 FELT TIPS AT \$3.20 EACH. \_\_\_\_\_

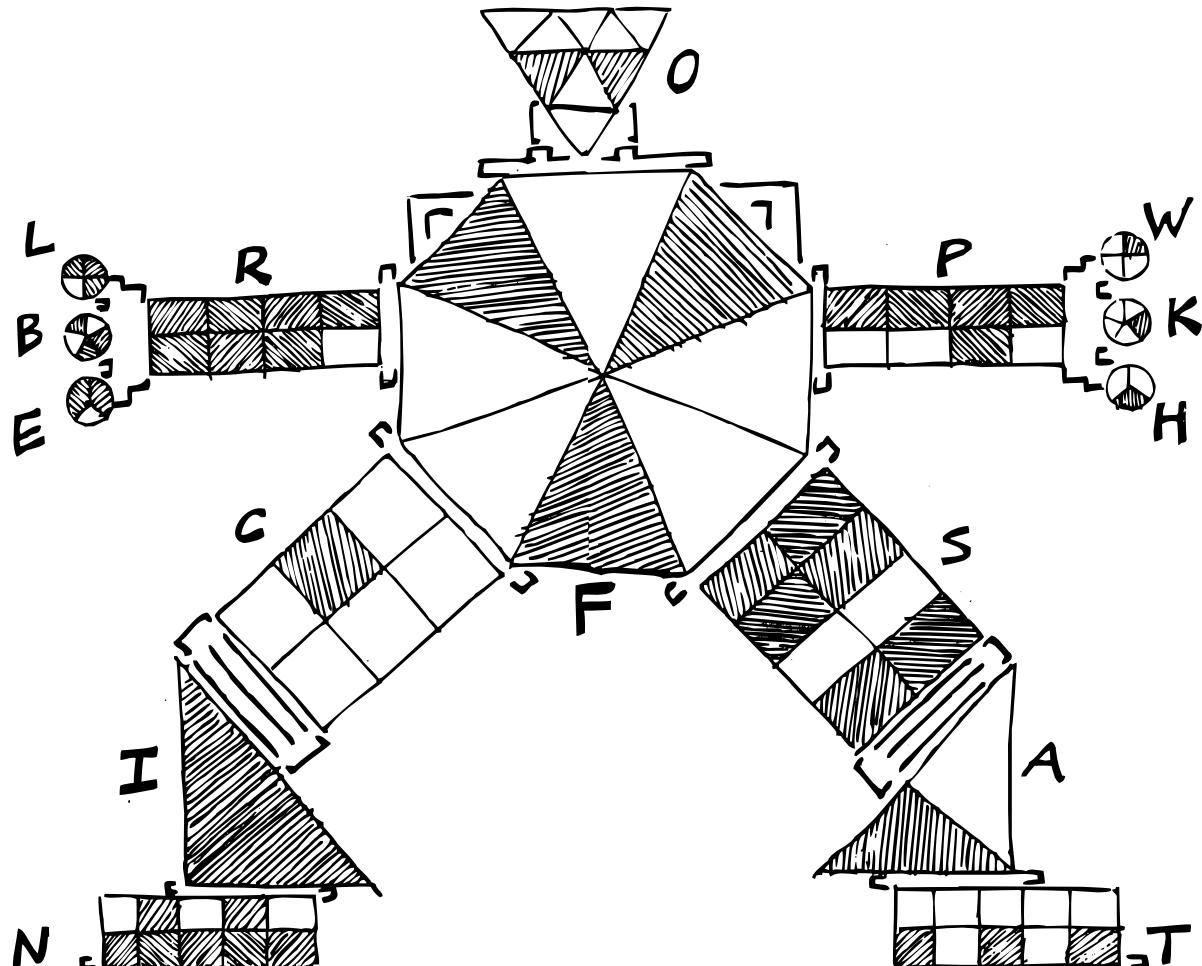
$\$28.76$	$\$85.74$	$\$64.48$	$\$75.34$	$\$43.70$
$+ 10.79$	$+ 23.46$	$- 16.88$	$- 32.99$	$- 29.90$
_____	_____	_____	_____	_____

## ANSWER TO THE NEAREST DOLLAR

$\$3.20 + \$4.60 \approx \underline{\hspace{2cm}}$      $\$7.35 + \$5.05 \approx \underline{\hspace{2cm}}$   
 $\$2.85 + \$1.20 \approx \underline{\hspace{2cm}}$      $\$2.90 + \$2.80 \approx \underline{\hspace{2cm}}$   
 $\$9.60 - \$8.75 \approx \underline{\hspace{2cm}}$      $\$6.25 - \$3.95 \approx \underline{\hspace{2cm}}$   
 $\$24.35 - \$12.50 \approx \underline{\hspace{2cm}}$      $\$17.80 - \$9.20 \approx \underline{\hspace{2cm}}$

# FRACTION-MAN

How much is shaded? Write the letter from each body part above the corresponding fraction.



$$\frac{1}{2} \quad \frac{3}{8} \quad \frac{7}{8} \quad \frac{1}{2} \quad \frac{1}{6} \quad \frac{3}{10} \quad 1\frac{2}{9} \quad \frac{7}{10} \quad 1\frac{6}{8} \quad \frac{1}{2} \quad \frac{1}{6} \quad \frac{1}{3} \quad 1\frac{5}{8}$$

$$\frac{2}{9} \quad \frac{3}{8} \quad \frac{3}{8} \quad \frac{3}{10} \quad \frac{1}{3} \quad \frac{2}{3} \quad \frac{1}{4} \quad \frac{1}{3} \quad \frac{2}{9} \quad \frac{3}{4} \quad \frac{2}{3} \quad \frac{3}{5} \quad \frac{3}{4} \quad \frac{2}{9} \quad \frac{1}{6} \quad \frac{1}{5}$$



# - FAMILIES OF FRACTIONS

FILL IN THE GAPS TO MAKE SOME EQUIVALENT FRACTIONS!

$$\frac{1}{3} = \frac{1}{6} \quad \frac{1}{4} = \frac{3}{12} \quad \frac{7}{10} = \frac{14}{20} \quad \frac{1}{5} = \frac{3}{15} \quad \frac{3}{4} = \frac{15}{40}$$

$$\frac{2}{3} = \frac{6}{9} \quad \frac{4}{5} = \frac{16}{20} \quad \frac{3}{8} = \frac{15}{40} \quad \frac{12}{16} = \frac{3}{4} \quad \frac{2}{8} = \frac{1}{4}$$

$$\frac{8}{12} = \frac{2}{3} \quad \frac{10}{16} = \frac{5}{8} \quad \frac{25}{30} = \frac{5}{6} \quad \frac{9}{18} = \frac{1}{2} \quad \frac{21}{30} = \frac{7}{10}$$

$$\frac{1}{2} = \frac{3}{6} = \frac{10}{20} = \frac{24}{48}$$

$$\frac{3}{4} = \frac{9}{12} = \frac{12}{16} = \frac{15}{20}$$

$$\frac{8}{10} = \frac{4}{5} = \frac{16}{20} = \frac{32}{40}$$

$$\frac{5}{8} = \frac{10}{16} = \frac{15}{24} = \frac{30}{40}$$

- NOW SIMPLIFY THESE FRACTIONS TO MAKE THEM AS SMALL AS YOU CAN!

$$\frac{6}{10} = \frac{3}{5} \quad \frac{14}{28} = \frac{1}{2} \quad \frac{20}{35} = \frac{4}{7} \quad \frac{21}{24} = \frac{7}{8} \quad \frac{12}{48} = \frac{1}{4}$$

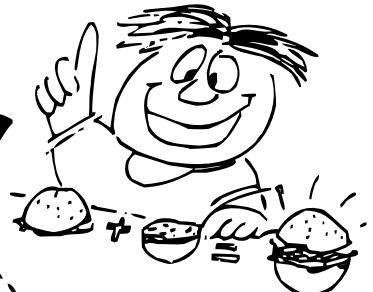
SHADE IN EACH BOX WHICH CONTAINS A FRACTION THAT IS EQUIVALENT TO THE FRACTION AT THE BOTTOM OF THAT COLUMN!



$\frac{10}{30}$	$\frac{20}{70}$	$\frac{9}{30}$	$\frac{10}{30}$	$\frac{10}{25}$	$\frac{15}{18}$	$\frac{7}{28}$	$\frac{15}{36}$	$\frac{20}{35}$	$\frac{21}{28}$	$\frac{21}{27}$
$\frac{7}{15}$	$\frac{8}{28}$	$\frac{30}{90}$	$\frac{8}{11}$	$\frac{22}{55}$	$\frac{25}{36}$	$\frac{2}{8}$	$\frac{2}{7}$	$\frac{12}{21}$	$\frac{18}{22}$	$\frac{14}{18}$
$\frac{5}{18}$	$\frac{14}{49}$	$\frac{9}{40}$	$\frac{5}{12}$	$\frac{14}{35}$	$\frac{30}{30}$	$\frac{10}{40}$	$\frac{21}{60}$	$\frac{28}{49}$	$\frac{30}{40}$	$\frac{35}{45}$
$\frac{8}{20}$	$\frac{10}{35}$	$\frac{21}{50}$	$\frac{1}{22}$	$\frac{18}{45}$	$\frac{25}{30}$	$\frac{5}{20}$	$\frac{9}{16}$	$\frac{16}{28}$	$\frac{9}{15}$	$\frac{6}{8}$
$\frac{3}{12}$	$\frac{1}{6}$	$\frac{16}{50}$	$\frac{7}{16}$	$\frac{4}{7}$	$\frac{30}{42}$	$\frac{4}{9}$	$\frac{4}{9}$	$\frac{6}{10}$	$\frac{15}{24}$	$\frac{21}{30}$
$\frac{2}{6}$	$\frac{4}{14}$	$\frac{18}{60}$	$\frac{8}{18}$	$\frac{4}{10}$	$\frac{20}{24}$	$\frac{11}{14}$	$\frac{3}{9}$	$\frac{8}{14}$	$\frac{9}{12}$	$\frac{28}{36}$
$\frac{7}{21}$	$\frac{10}{28}$	$\frac{6}{15}$	$\frac{9}{14}$	$\frac{20}{50}$	$\frac{30}{40}$	$\frac{4}{16}$	$\frac{20}{50}$	$\frac{24}{36}$	$\frac{18}{24}$	$\frac{14}{20}$
$\frac{5}{15}$	$\frac{5}{11}$	$\frac{5}{12}$	$\frac{1}{3}$	$\frac{12}{30}$	$\frac{10}{12}$	$\frac{6}{24}$	$\frac{12}{30}$	$\frac{12}{28}$	$\frac{15}{20}$	$\frac{42}{45}$
$\frac{4}{12}$	$\frac{4}{16}$	$\frac{10}{30}$	$\frac{1}{4}$	$\frac{16}{40}$	$\frac{20}{30}$	$\frac{3}{12}$	$\frac{14}{21}$	$\frac{5}{8}$	$\frac{24}{32}$	$\frac{28}{35}$
$\frac{6}{18}$	$\frac{6}{21}$	$\frac{12}{40}$	$\frac{2}{3}$	$\frac{6}{15}$	$\frac{15}{25}$	$\frac{9}{36}$	$\frac{6}{24}$	$\frac{8}{15}$	$\frac{6}{8}$	$\frac{8}{10}$

$\frac{1}{3}$	$\frac{2}{7}$	$\frac{3}{10}$	$\frac{6}{11}$	$\frac{2}{5}$	$\frac{5}{6}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{4}{7}$	$\frac{3}{4}$	$\frac{7}{9}$
---------------	---------------	----------------	----------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------

# HALVE IT... ...AND YOU HAVE IT!



$$\begin{array}{c} \text{H} \\ + \\ \frac{1}{2} \end{array} = \begin{array}{c} \text{H} \\ + \\ \frac{1}{2} \end{array}$$

$$\begin{array}{c} \text{H} \\ - \\ \frac{2}{3} \end{array} = \begin{array}{c} \text{H} \\ - \\ \frac{1}{3} \end{array}$$

$$\begin{array}{c} \text{H} \\ + \\ \frac{1}{4} \end{array} = \begin{array}{c} \text{H} \\ + \\ \frac{2}{4} \end{array}$$

$$\begin{array}{c} \text{H} \\ - \\ \frac{4}{5} \end{array} = \begin{array}{c} \text{H} \\ - \\ \frac{2}{5} \end{array}$$

NOW ARE YOU READY FOR THESE..?

$$\frac{1}{3} + \frac{1}{3} = \frac{1}{3}$$

$$\frac{2}{5} + \frac{1}{5} = \frac{1}{5}$$

$$\frac{3}{7} + \frac{3}{7} = \frac{1}{7}$$

$$\frac{2}{7} + \frac{4}{7} = \frac{1}{7}$$

$$\frac{4}{9} + \frac{4}{9} = \frac{1}{9}$$

$$\frac{4}{11} + \frac{6}{11} = \frac{1}{11}$$

$$\frac{13}{15} - \frac{6}{15} = \frac{1}{15}$$

$$\frac{6}{11} - \frac{2}{11} = \frac{1}{11}$$

$$\frac{10}{13} - \frac{5}{13} = \frac{1}{13}$$

$$\frac{5}{8} + \frac{2}{8} =$$

$$\frac{4}{6} + \frac{1}{6} =$$

$$\frac{6}{10} + \frac{3}{10} =$$

$$\frac{5}{8} - \frac{2}{8} =$$

$$\frac{4}{6} - \frac{1}{6} =$$

$$\frac{6}{10} - \frac{3}{10} =$$

$$\frac{6}{13} + \frac{4}{13} =$$

$$\frac{8}{13} + \frac{5}{13} =$$

$$\frac{9}{13} - \frac{9}{13} =$$

WHO'S PART OF OUR TEAM?

$$\frac{2}{4} \frac{4}{7} \frac{1}{5} \quad \frac{4}{7} \frac{5}{9} \frac{6}{5} \frac{3}{5} \quad \frac{8}{9} \frac{5}{9} \frac{4}{5} \frac{4}{9} !$$

$$F = \frac{4}{5} - \frac{1}{5}$$

$$T = \frac{1}{4} + \frac{1}{4}$$

$$C = \frac{2}{5} + \frac{2}{5}$$

$$K = \frac{7}{9} - \frac{3}{9}$$

$$E = \frac{6}{7} - \frac{5}{7}$$

$$L = \frac{2}{9} + \frac{4}{9}$$

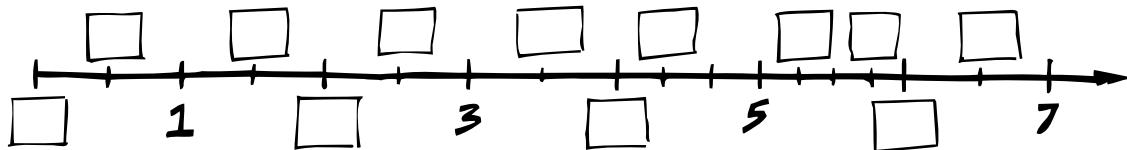
$$H = \frac{3}{7} + \frac{1}{7}$$

$$B = \frac{5}{9} + \frac{3}{9}$$

$$A = \frac{8}{9} - \frac{3}{9}$$

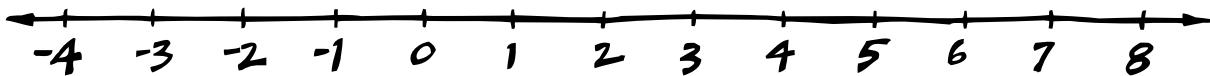
# "COME FIND MY PLACE!"

START BY WRITING THE MISSING NUMBERS AND FRACTIONS IN THE BOXES ON THE LINE!

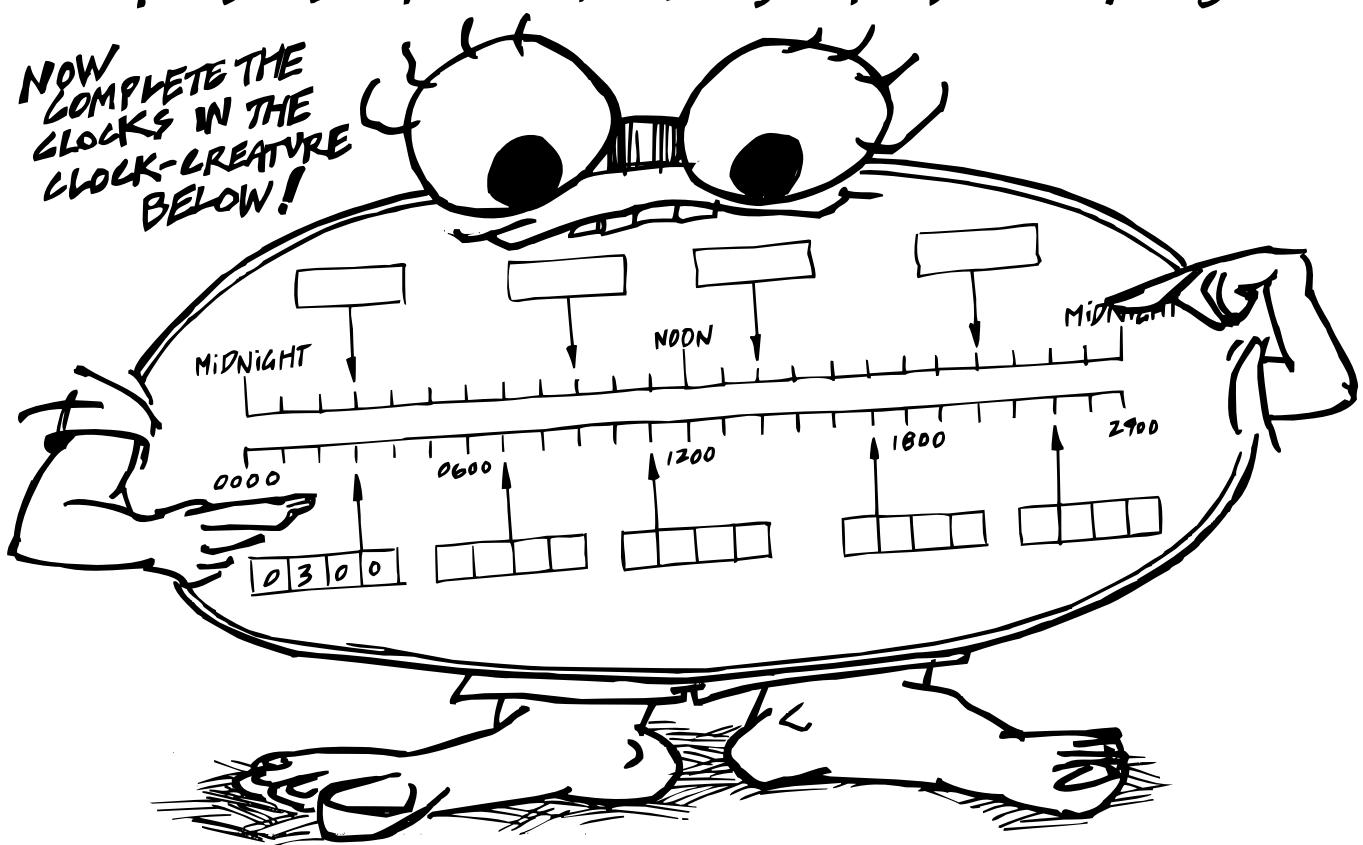


HERE ARE SOME PAIRS OF LETTERS AND NUMBERS.  
WRITE EACH LETTER ABOVE THE NUMBER LINE AT ITS CORRECT POSITION AND A SPECIAL MESSAGE WILL APPEAR!

A 5	M $-2\frac{1}{2}$	U $\frac{1}{2}$	C $4\frac{1}{2}$
S $2\frac{1}{2}$	E $7\frac{1}{10}$	L $6\frac{5}{8}$	S 1
M $3\frac{1}{4}$	S $5\frac{2}{3}$	E $1\frac{1}{4}$	I $2\frac{1}{9}$
O $\frac{1}{15}$	T 6	Y -2	H $-\frac{1}{2}$
Y $3\frac{7}{10}$			



NOW COMPLETE THE CLOCKS IN THE CLOCK-CREATURE BELOW!



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$6 + 8 = \underline{\hspace{2cm}}$

$8 - 6 = \underline{\hspace{2cm}}$

$5 \times 3 = \underline{\hspace{2cm}}$

$6 \div 2 = \underline{\hspace{2cm}}$

$7 + 4 = \underline{\hspace{2cm}}$

$5 - 5 = \underline{\hspace{2cm}}$

$6 \times 6 = \underline{\hspace{2cm}}$

$8 \div 8 = \underline{\hspace{2cm}}$

$7 + 7 = \underline{\hspace{2cm}}$

$5 + 6 = \underline{\hspace{2cm}}$



## MIGHTY METRICS

$60\text{m} + 50\text{m} = \underline{\hspace{2cm}}$

$48\text{cm} + 16\text{cm} = \underline{\hspace{2cm}}$

$87\text{m} - 47\text{m} = \underline{\hspace{2cm}}$

$54\text{mm} - 26\text{mm} = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}\text{ cm} = 1\text{m}$

$\underline{\hspace{2cm}}\text{ cm} = 2\text{m}$

$1000\text{ ml} = \underline{\hspace{2cm}}\text{ l}$

$3000\text{ ml} = \underline{\hspace{2cm}}\text{ l}$

$1234\text{ g} = \underline{\hspace{2cm}}\text{ kg}$

$\underline{\hspace{2cm}}\text{ g} = 4.321\text{ kg}$

## FANTASTIC FRACTIONS

$\frac{1}{2} \text{ OF } 2 = \underline{\hspace{2cm}}$

$\frac{1}{2} \text{ OF } 6 = \underline{\hspace{2cm}}$

$\frac{1}{2} \text{ OF } 14 = \underline{\hspace{2cm}}$

$\frac{1}{2} \text{ OF } 20 = \underline{\hspace{2cm}}$

$\frac{1}{2} \times \frac{1}{2} = \underline{\hspace{2cm}}$

$\frac{2}{5} \times \frac{4}{7} = \underline{\hspace{2cm}}$

$\frac{1}{2} + \frac{1}{2} = \underline{\hspace{2cm}}$

$\frac{2}{5} + \frac{1}{5} = \underline{\hspace{2cm}}$

$\frac{1}{2} - \frac{1}{2} = \underline{\hspace{2cm}}$

$\frac{1}{3} - \frac{1}{3} = \underline{\hspace{2cm}}$

## EXTRA EXAMPLES

$7 \text{ DAYS} = \underline{\hspace{2cm}} \text{ WEEK}$

$\underline{\hspace{2cm}} \text{ SECONDS IN 1 MINUTE}$

$0.6 + 0.5 = \underline{\hspace{2cm}}$

$1.8 - 0.9 = \underline{\hspace{2cm}}$

$0.2 \times 4 = \underline{\hspace{2cm}}$

$0.4 \div 2 = \underline{\hspace{2cm}}$

$1, 2, 4, \underline{\hspace{2cm}}, 16$

$238 + 832 = \underline{\hspace{2cm}}$

$541 - 268 = \underline{\hspace{2cm}}$

$2^2 = \underline{\hspace{2cm}}$

## THE QUINTUS QUIZ

-FIND THE COST OF...

6 PENCILS  $\underline{\hspace{2cm}}$

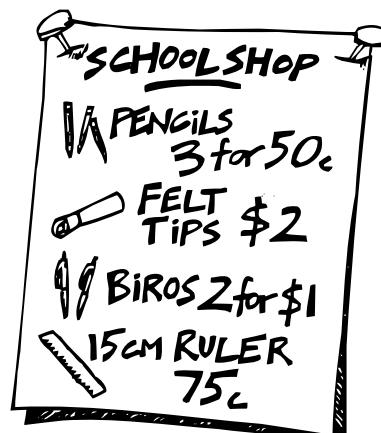
3 FELT TIPS  $\underline{\hspace{2cm}}$

2 RULERS  $\underline{\hspace{2cm}}$

3 PENCILS & 2 BIROS  $\underline{\hspace{2cm}}$

3 FELT TIPS, 2 BIROS,

& 2 RULERS  $\underline{\hspace{2cm}}$



NUMBER OF MISTAKES  $\underline{\hspace{2cm}}$

# AN INTRODUCTION TO DEGREES

- MEASURE THE ANGLES  
ON THIS PAGE CAREFULLY  
AND WRITE THE LETTERS  
ABOVE THE CORRECT  
ANSWER IN THE MESSAGE  
BELOW!

$\overline{80}$   $\overline{10}$   $\overline{220}$   $\overline{260}$   $\overline{260}$   $\overline{220}$

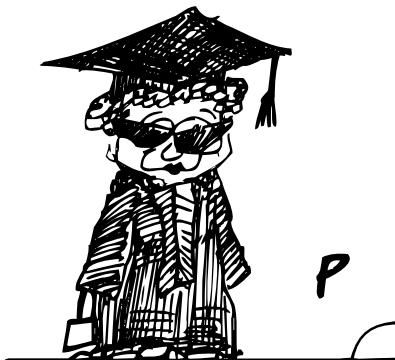
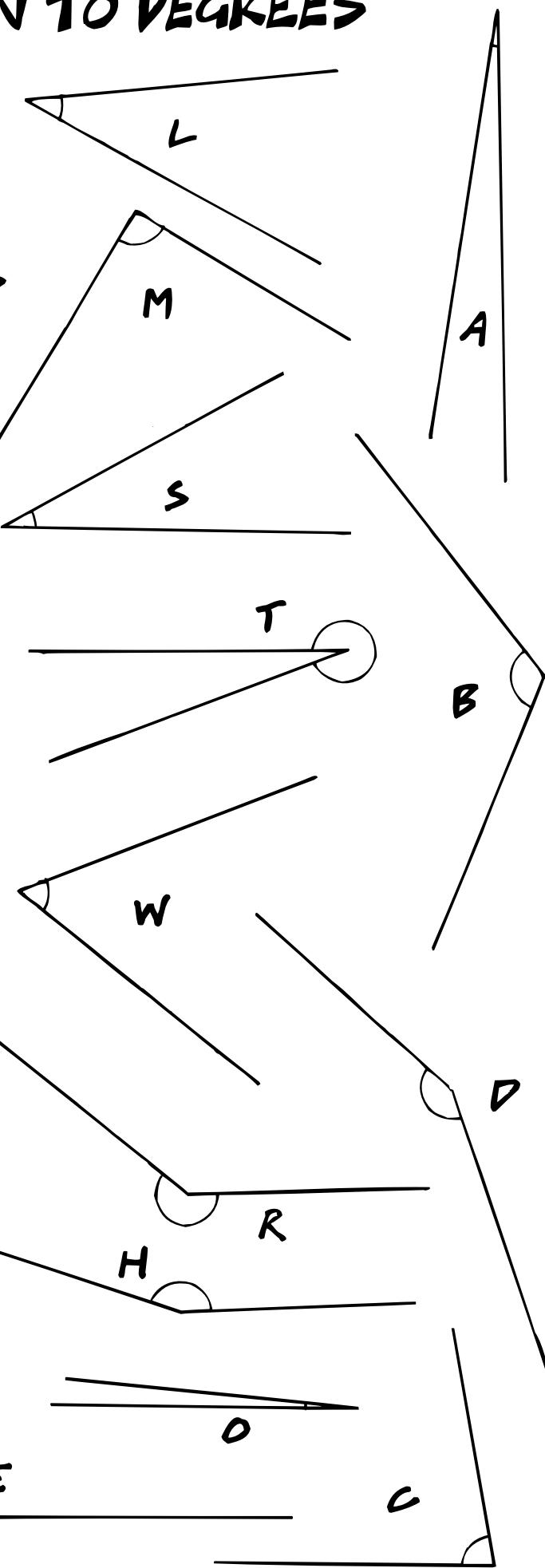
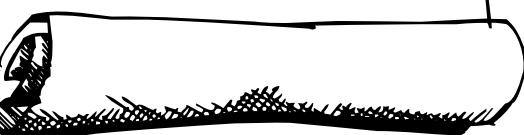
$\overline{340}$   $\overline{5}$   $\overline{60}$   $\overline{10}$   $\overline{220}$   $\overline{150}$   $\overline{30}$   
 $\overline{10}$

$\overline{120}$   $\overline{10}$  '  $\overline{90}$   $\overline{10}$  '

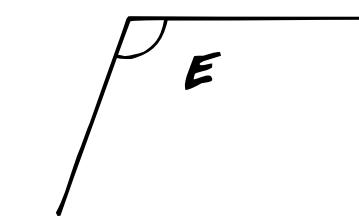
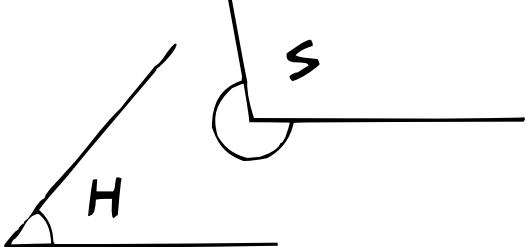
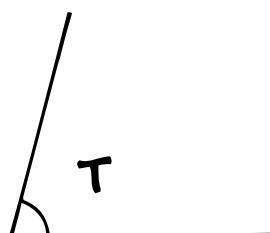
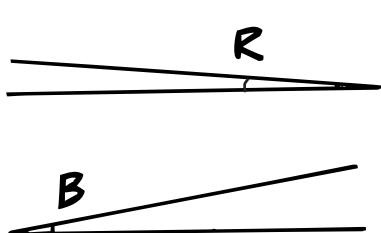
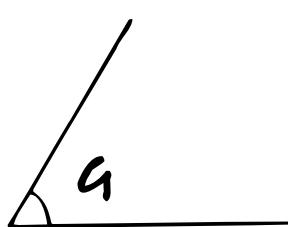
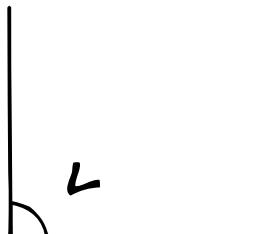
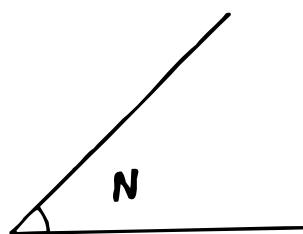
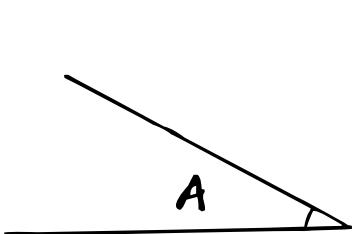
$\overline{120}$   $\overline{30}$   $\overline{80}$  '  $\overline{90}$   $\overline{30}$   $\overline{80}$  '

$\overline{35}$   $\overline{35}$   $\overline{120}$  '  $\overline{95}$   $\overline{160}$   $\overline{150}$  '

$\overline{90}$   $\overline{150}$  '  $\overline{5}$   $\overline{220}$   $\overline{120}$   $\overline{260}$  '



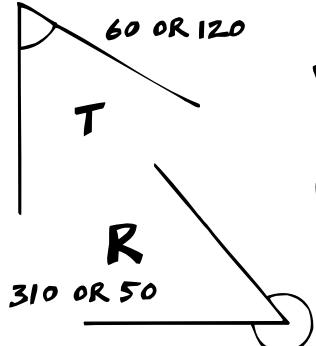
**YOUR MISSION, SHOULD YOU CHOOSE TO  
ACCEPT IT, IS TO MEASURE ALL  
THE ANGLES AND WRITE THE  
LETTERS ABOVE THE CORRECT ANSWER  
IN THE CODE! (DON'T WORRY, THIS PAGE  
WON'T SELF-DESTRUCT!)**



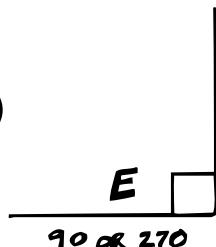
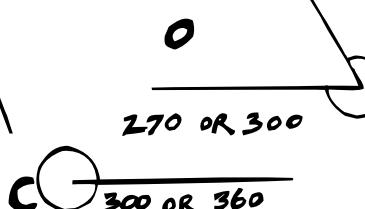
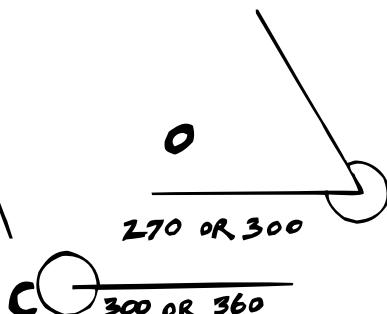
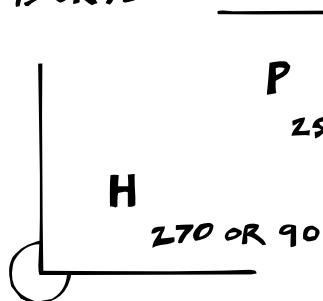
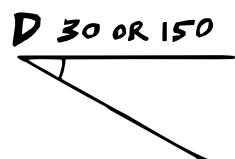
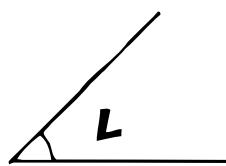
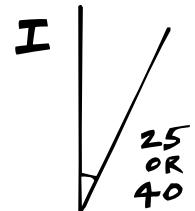
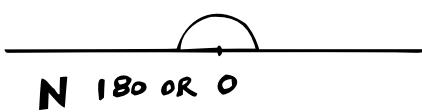
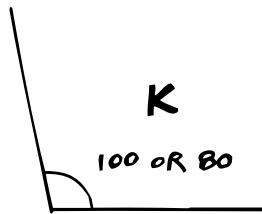
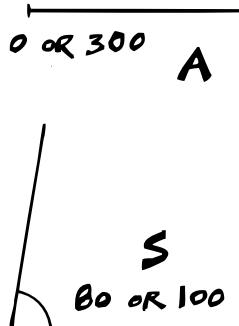
$\overline{180} \quad \overline{110} \quad \overline{110} \quad \overline{75} \quad \overline{75} \quad \overline{50} \quad \overline{110}$   
 $\overline{30} \quad \overline{45} \quad \overline{60} \quad \overline{90} \quad \overline{110} \quad \overline{10} \quad \overline{350} \quad \overline{260} \quad \overline{75} \quad \overline{110} \quad \overline{5} \quad \overline{260}$  !



**-CHOOSE THE ANGLE SIZE THAT IS THE  
BEST ESTIMATE OF THE ANGLE AND  
MATCH UP THE LETTER OF THE ANGLE WITH  
THE ANSWERS IN THE PUZZLE!**



W  
10  
OR  
170



"

200 0 60 270 90 200 0 60 25 360 25 0 180 80 100 180 300 10

0 45 45 60 270 90 0 180 150 45 90 80 270 300 10

30 300 160 300 15 200 90 0 80 15 310 90 15 250 ?

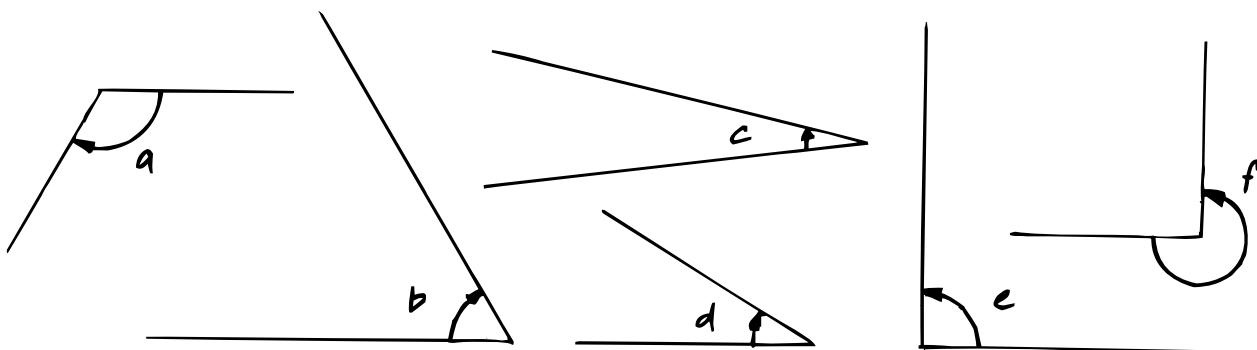
# MEASURING ANGLES

ESTIMATE MEANS \_\_\_\_\_

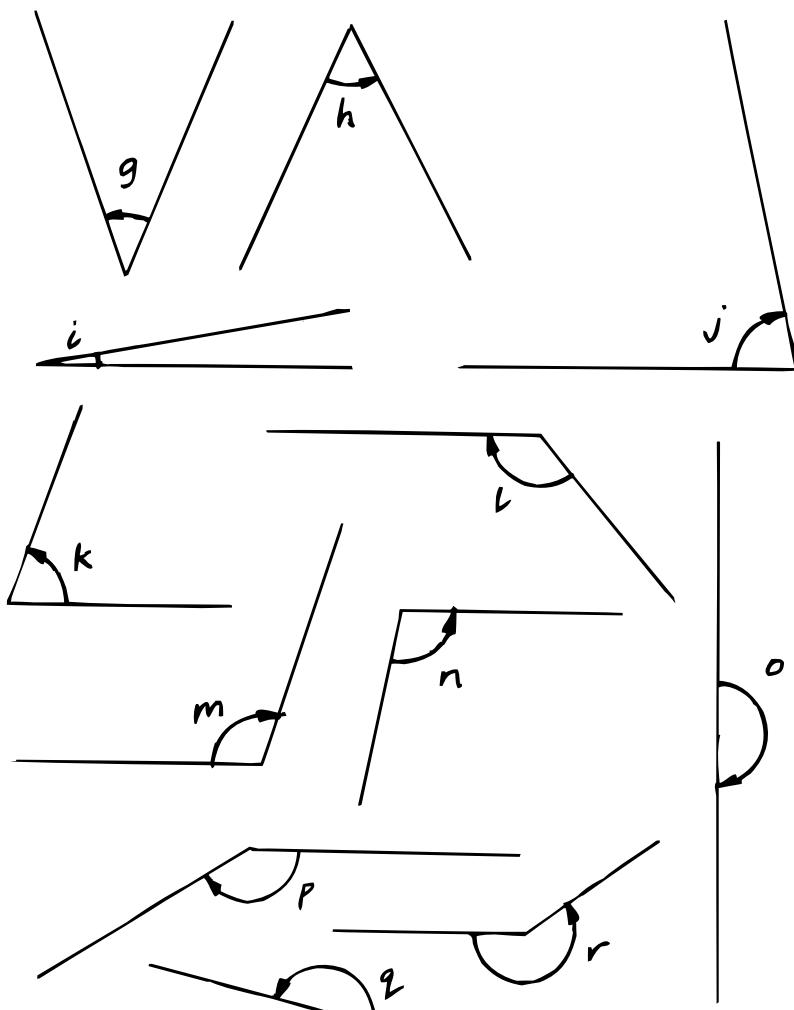
WE MEASURE ANGLE SIZE WITH A \_\_\_\_\_

1 ESTIMATE THE SIZE OF EACH ANGLE AND WRITE YOUR GUESSES IN THE TABLE.

2 ASK YOUR TEACHER FOR A \_\_\_\_\_ THEN MEASURE EACH ANGLE CAREFULLY! RECORD EACH MEASURE IN THE TABLE.



	ESTIMATE	MEASURE
a		
b		
c		
d		
e		
f		
g		
h		
i		
j		
k		
l		
m		
n		
o		
p		
q		
r		

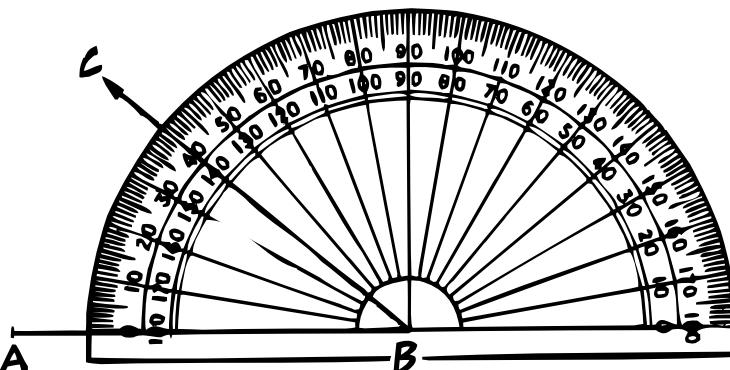


# DRAWING ANGLES... IS LIKE, EXCELLENT FUN!

YOU HAVE LEARNT TO USE A PROTRACTOR TO MEASURE ANGLES.  
IT CAN ALSO BE USED TO HELP YOU DRAW ANGLES.

- 1 PLACE YOUR PROTRACTOR ON AB AS SHOWN (CENTRE ON B)
- 2 COUNT FROM 0° CLOCKWISE TO 40°, & MARK IT.
- 3 REMOVE YOUR PROTRACTOR. DRAW THE RAY BC.

THEN  $\angle ABC = 40^\circ$ . NOW MAKE 3 EXACT COPIES.



A ————— B      A ————— B      A ————— B  
AT D DRAW AN ANGLE OF  $20^\circ$     AT E DRAW AN ANGLE OF  $70^\circ$     AT G AN ANGLE OF  $90^\circ$

C ————— D      E ————— F      G ————— H  
AT J DRAW AN ANGLE OF  $95^\circ$     AT K AN ANGLE OF  $100^\circ$     AT M AN ANGLE OF  $150^\circ$

I ————— J

K ————— L

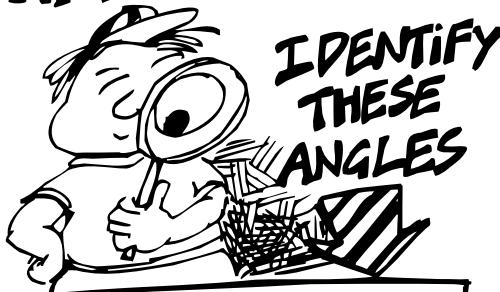
M ————— N

## DRAWING TRIANGLES

AT T DRAW AN ANGLE OF  $30^\circ$ ,  
AT Y DRAW AN ANGLE OF  $50^\circ$ ,  
JOIN AT R TO MAKE  $\triangle TRY$ .

AT U DRAW AN ANGLE OF  $120^\circ$ ,  
AT V DRAW AN ANGLE OF  $10^\circ$ ,  
JOIN AT L TO MAKE  $\triangle LUV$ .

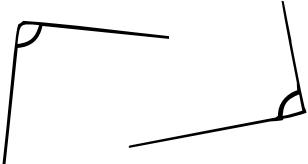
# ARE WE THE RIGHT TYPES?!



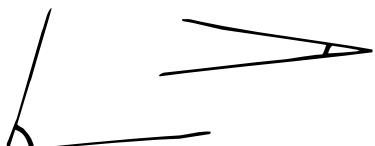
IDENTIFY  
THESE  
ANGLES

DRAW 3 OBTUSE ANGLES

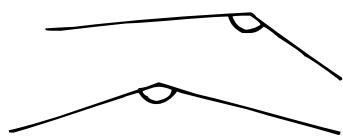
THESE ARE R \_\_\_\_\_



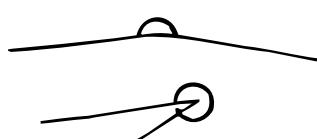
THESE ARE A \_\_\_\_\_



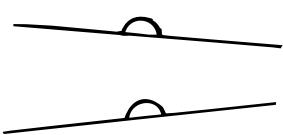
THESE ARE O \_\_\_\_\_



THESE ARE R \_\_\_\_\_



THESE ARE S \_\_\_\_\_



DRAW 2 STRAIGHT ANGLES

DRAW 3 REFLEX ANGLES

DRAW 2 ACUTE ANGLES

DRAW 3 RIGHT ANGLES

NOW FILL IN THE MISSING WORD  
BY IDENTIFYING THE ANGLES BELOW!

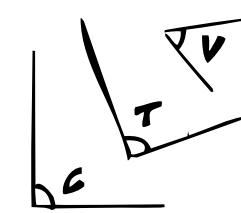
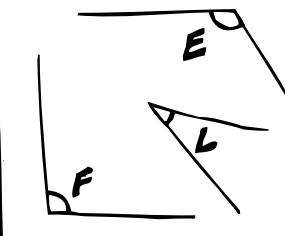
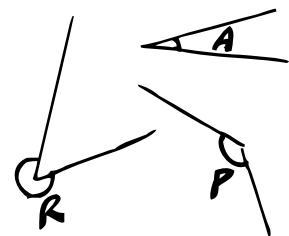
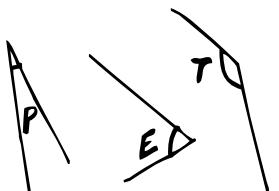
"SIMPLY - - - - -"

WHICH ARE ACUTE?

WHICH ARE REFLEX?

WHICH ARE OBTUSE?

WHICH ARE RIGHT?



# WHIZZ-KIDS WORKSHEET!



## NIFTY NUMBERS

$5+10 =$ _____	$14+8 =$ _____
$18-9 =$ _____	$19-6 =$ _____
$15-12 =$ _____	$15+12 =$ _____
$37+12 =$ _____	$48 \div 4 =$ _____
$2 \times 11 =$ _____	$32-8 =$ _____
$25+8 =$ _____	$54 \div 6 =$ _____
$6 \times 40 =$ _____	$22 \times 2 =$ _____
$15 \times 7 =$ _____	$15 \times 3 =$ _____
$48 \div 8 =$ _____	$9 \times 9 =$ _____
$15 \div 5 =$ _____	$12 \times 12 =$ _____

## CALENDAR COLLECTIONS

HOW MANY DAYS IN MAY?  
\_\_\_\_\_

HOW MANY MONDAYS IN FEBRUARY?  
\_\_\_\_\_

WHAT DAY WAS 31ST JANUARY?  
\_\_\_\_\_

HOW MANY SCHOOL DAYS IN JUNE?  
\_\_\_\_\_

WHAT DATE IS THE LAST FRIDAY  
IN MAY?  
\_\_\_\_\_

HOW MANY DAYS IN OCTOBER &  
NOVEMBER?  
\_\_\_\_\_

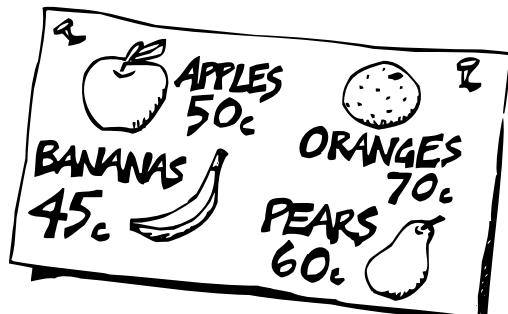
HOW MANY DAYS TO THE NEXT  
HOLIDAY?  
\_\_\_\_\_

HOW MANY DAYS IN A YEAR?  
\_\_\_\_\_

## EASY EQUATIONS

$5 +$ _____ $= 9$
$14 -$ _____ $= 12$
$15 \times$ _____ $= 45$
_____ $\times 6 = 36$
_____ $+ 8 = 15$
_____ $- 12 = 16$
$4 +$ _____ $= 16 + 2$
$8 +$ _____ $= 15 - 3$
$12 -$ _____ $= 8 + 2$
$2 \times 10 =$ _____ $\times 5$

## MONEY MIXTURES



- FIND THE COST OF:

2 APPLES \_\_\_\_\_

3 ORANGES \_\_\_\_\_

3 BANANAS AND A PEAR.  
\_\_\_\_\_

- WHAT IS THE CHANGE FROM

\$10 IF I BUY:

10 APPLES \_\_\_\_\_

12 ORANGES AND A PEAR.  
\_\_\_\_\_

10 BANANAS AND AN APPLE  
\_\_\_\_\_

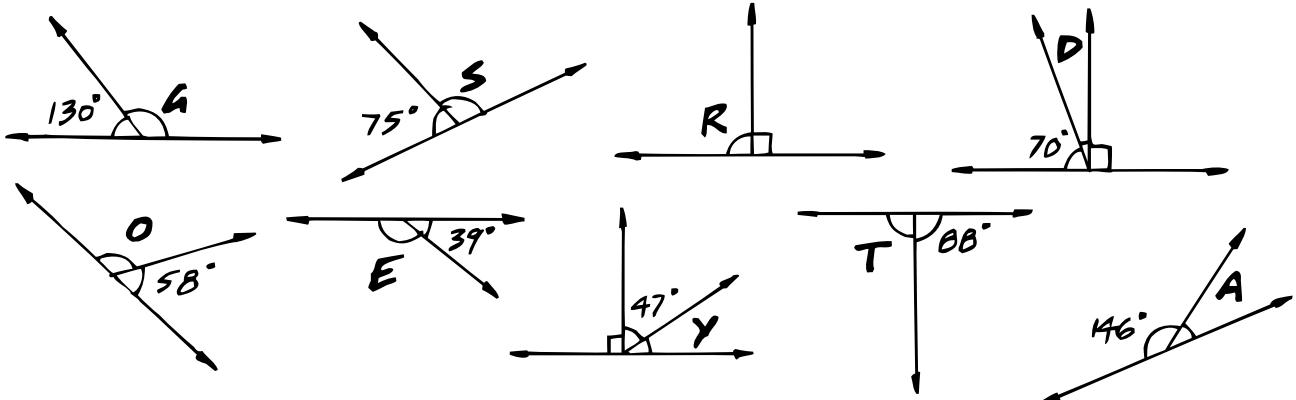
## NUMBER OF MISTAKES

# ANIMAL ANGLES

FIND THE UNKNOWN ANGLES TO SOLVE THE RIDDLES!  
DO NOT MEASURE

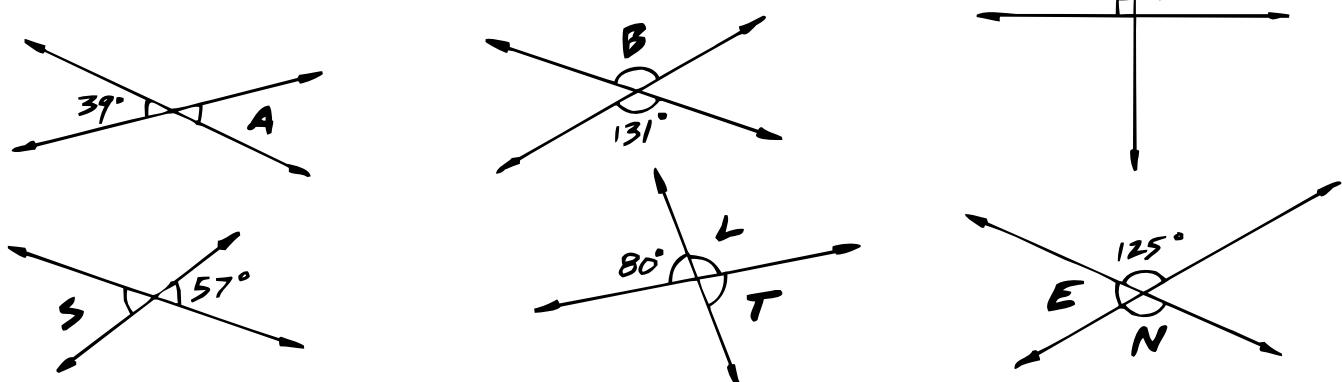
HOW DO YOU MAKE A BEAR RUN?

" 105 34 93    90 141 34 20 43    92 141 20 20 43    50 122 ! "



WHAT GAME DO HORSES PLAY?

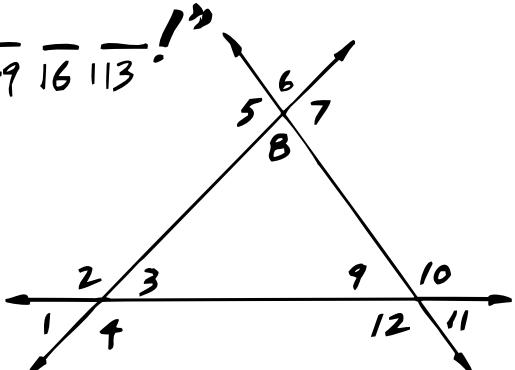
" 57 80 39 131 100 55    80 55 125 125 90 57 ! "



WHAT IS GREY, WEIGHS A TONNE, & HAS TWO WHEELS?

" 90 98 190 60 28 50    50 28    90 42 60 69 57 69 16 113 ! "

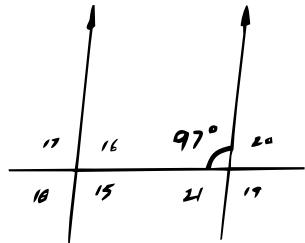
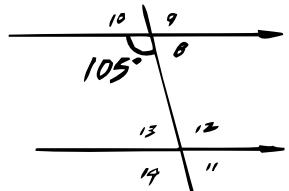
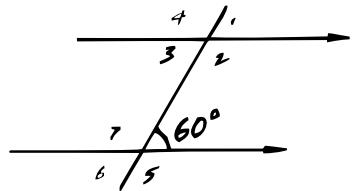
- B** IF  $\angle 1 = 42^\circ$  THEN  $\angle 3 =$  \_\_\_\_\_
- C** IF  $\angle 5 = 111^\circ$  THEN  $\angle 6 =$  \_\_\_\_\_
- H** IF  $\angle 10 = 140^\circ$  THEN  $\angle 12 =$  \_\_\_\_\_
- E** IF  $\angle 3 = 67^\circ$  THEN  $\angle 4 =$  \_\_\_\_\_
- K** IF  $\angle 7 = 98^\circ$  THEN  $\angle 5 =$  \_\_\_\_\_
- N** IF  $\angle 12 = 152^\circ$  THEN  $\angle 9 =$  \_\_\_\_\_
- L** IF  $\angle 2 = 164^\circ$  THEN  $\angle 1 =$  \_\_\_\_\_
- Y** IF  $\angle 11 = 57^\circ$  THEN  $\angle 9 =$  \_\_\_\_\_



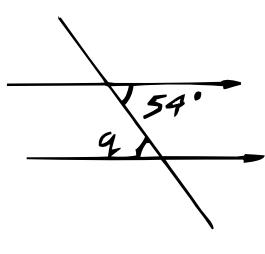
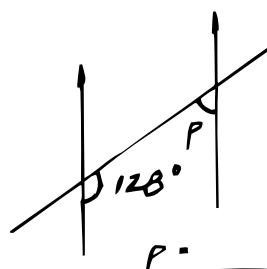
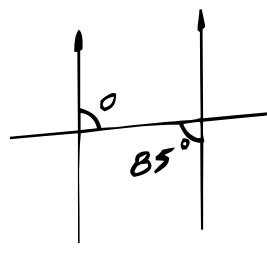
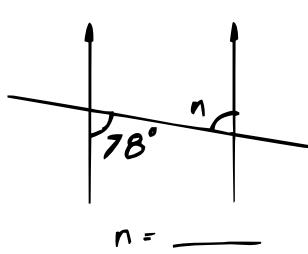
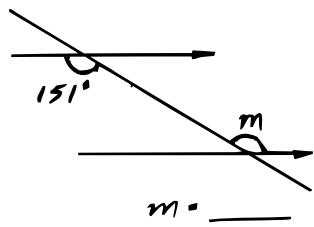
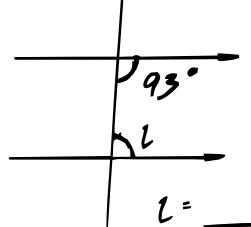
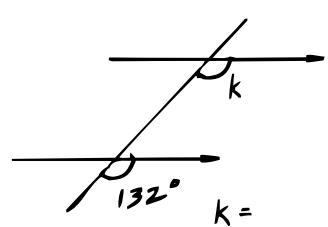
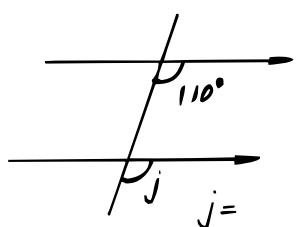
- I** IF  $\angle 3 = 60^\circ$  &  $\angle 8 = 60^\circ$  THEN  $\angle 9 =$  \_\_\_\_\_
- O** IF  $\angle 8 = 80^\circ$  &  $\angle 9 = 50^\circ$  THEN  $\angle 3 =$  \_\_\_\_\_
- A** IF  $\angle 9 = 100^\circ$  &  $\angle 3 = 40^\circ$  THEN  $\angle 8 =$  \_\_\_\_\_

# =PARA-REAL-FUN= ANGLES & LINES

C ANGLES ARE EQUAL    I ANGLES SUM TO  $180^\circ$     A ANGLES ARE EQUAL  
**WRITE IN ALL THE ANGLE MEASURES!**



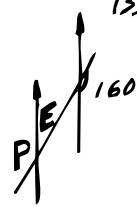
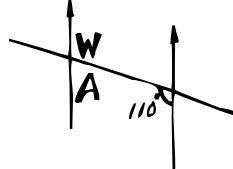
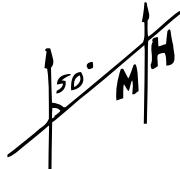
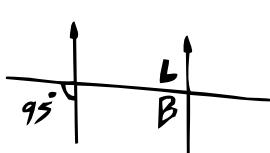
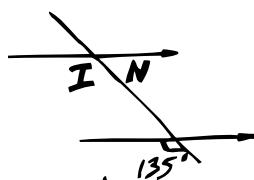
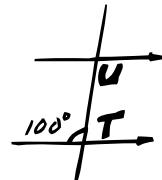
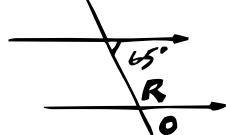
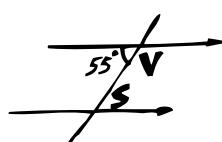
FIND THE UNKNOWN ANGLES



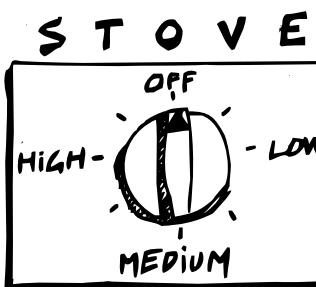
**FUN FACT!**

$80^\circ \quad 110^\circ \quad 65^\circ \quad 85^\circ \quad 135^\circ \quad 45^\circ \quad 20^\circ \quad 55^\circ \quad 80^\circ \quad 130^\circ \quad 70^\circ \quad 80^\circ \quad 45^\circ \quad 20^\circ \quad 125^\circ \quad 20^\circ \quad 115^\circ$

$50^\circ \quad 20^\circ \quad 20^\circ \quad 80^\circ \quad 50^\circ \quad 100^\circ \quad 55^\circ \quad 80^\circ \quad 95^\circ \quad 20^\circ \quad 160^\circ \quad 70^\circ \quad 115^\circ \quad 70^\circ \quad 85^\circ \quad 85^\circ \quad 20^\circ \quad 85^\circ$



# ROTATION



WHAT TEMPERATURE WOULD YOUR STOVE BE SET TO WITH THESE ROTATIONS?  
START AT 'OFF' EACH TIME

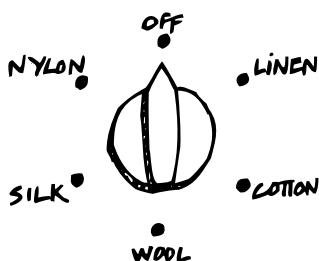
90° CLOCKWISE \_\_\_\_\_

180° ANTICLOCKWISE \_\_\_\_\_

270° CLOCKWISE \_\_\_\_\_

360° CLOCKWISE \_\_\_\_\_

## IRON



HOW MANY DEGREES TO SET YOUR IRON FROM:

OFF TO WOOL \_\_\_\_\_

OFF TO LINEN \_\_\_\_\_

COTTON TO SILK \_\_\_\_\_

NYLON TO LINEN \_\_\_\_\_

NAME THE TOWNS. THE ARROW IN THE MIDDLE OF PROTRACTARUA IS WHERE YOU SHOULD START MEASURING EACH TIME!

15° CLOCKWISE \_\_\_\_\_

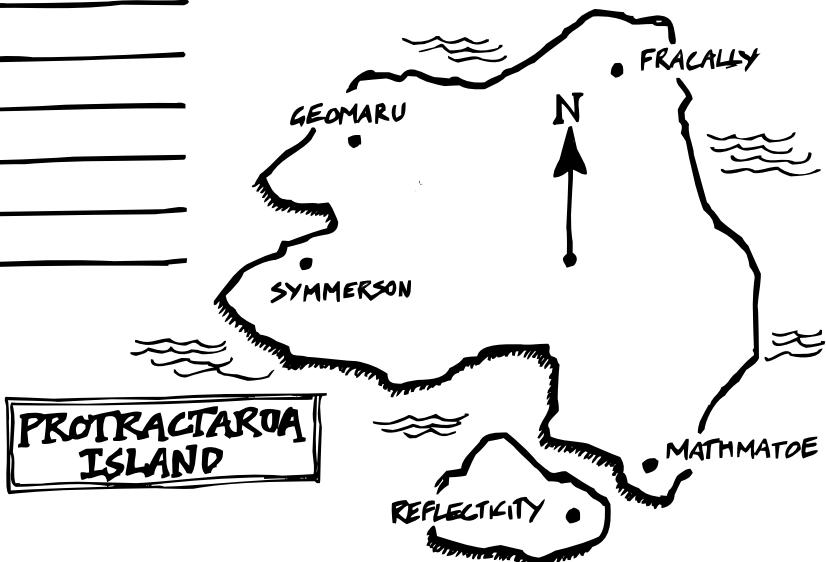
180° CLOCKWISE \_\_\_\_\_

270° CLOCKWISE \_\_\_\_\_

30° ANTICLOCKWISE \_\_\_\_\_

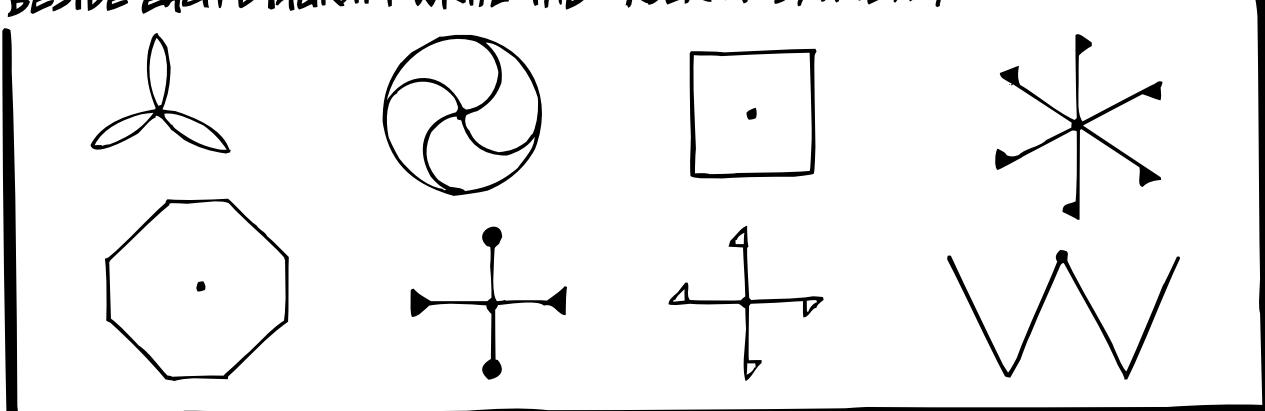
160° CLOCKWISE \_\_\_\_\_

90° ANTICLOCKWISE \_\_\_\_\_

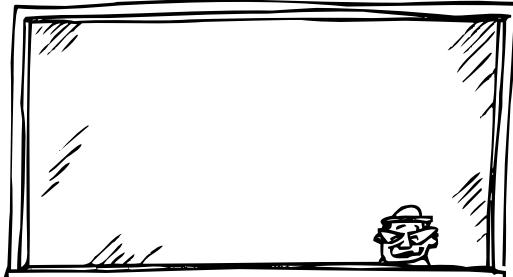


## ROTATIONAL SYMMETRY

BESIDE EACH DIAGRAM WRITE THE ORDER OF SYMMETRY

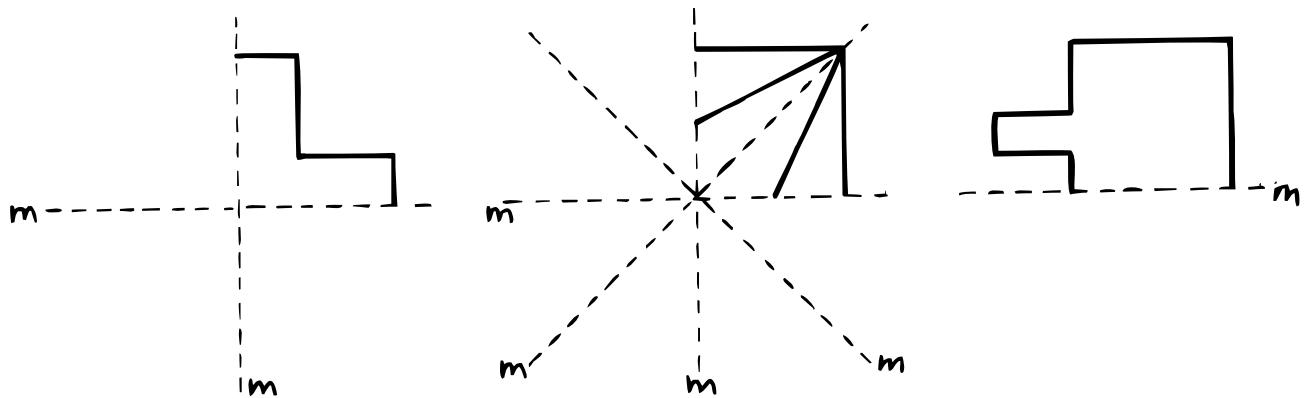


# REFLECTION - YOU'LL NEED A MIRROR FOR THIS PAGE!

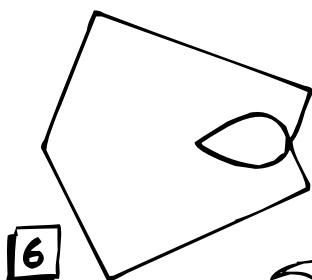
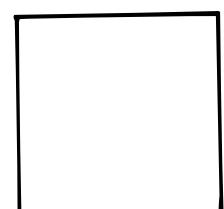
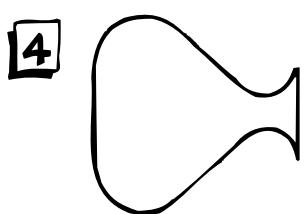
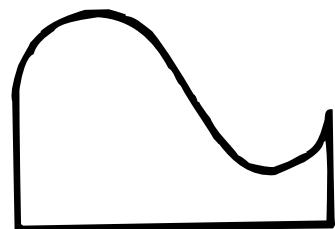
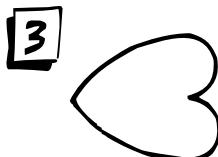
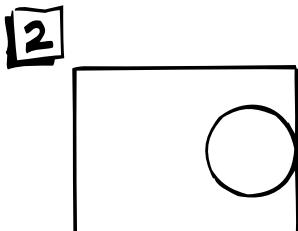
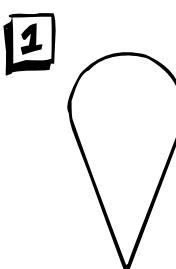


# WHAT WOULD THE WINDOW LOOK LIKE FROM THE OTHER SIDE?

## COMPLETE THE SHAPES



NOW USE A MIRROR ON THIS SHAPE →  
TO MAKE THE SHAPES BELOW ↓

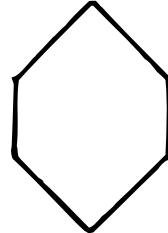
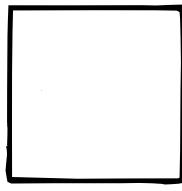
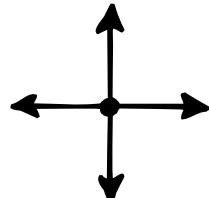
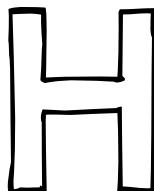
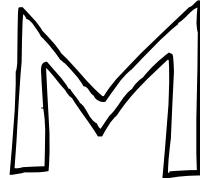
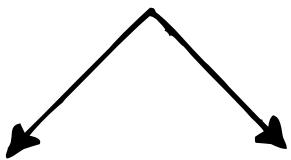


## **COMPLETE THE REFLECTION!**

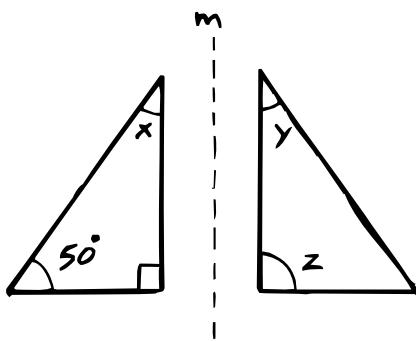
AGJIGATEBÝA SI MOW A DEVASH A SI MOW A

# SYMMETRY

MARK IN THE LINES OF SYMMETRY!



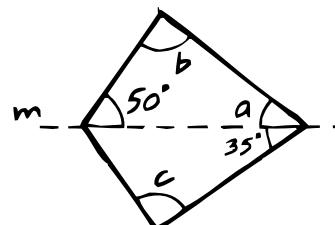
CALCULATE THE MISSING ANGLES



$$x = \underline{\hspace{2cm}}$$

$$y = \underline{\hspace{2cm}}$$

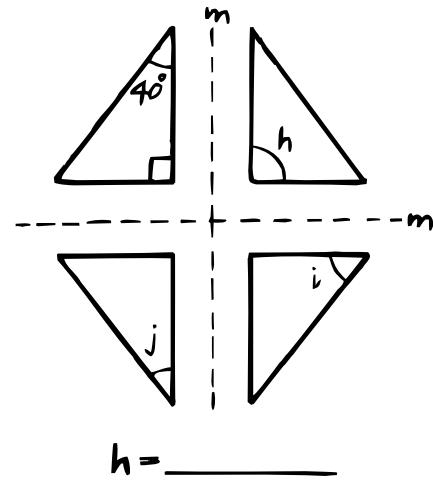
$$z = \underline{\hspace{2cm}}$$



$$a = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

$$c = \underline{\hspace{2cm}}$$

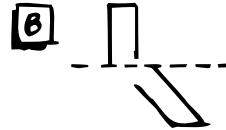
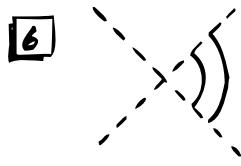
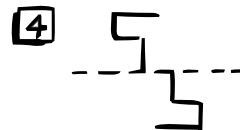
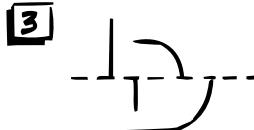
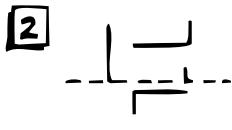
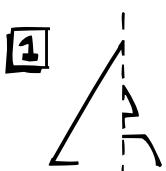


$$h = \underline{\hspace{2cm}}$$

$$i = \underline{\hspace{2cm}}$$

$$j = \underline{\hspace{2cm}}$$

COMPLETE THE FIGURES AROUND  
EACH LINE OF SYMMETRY TO ANSWER THE CODE!



"  
 $\frac{s}{2}$   $\frac{s}{8}$   $\frac{4}{4}$   $\frac{5}{5}$   $\frac{6}{6}$   $\frac{s}{s}$      $\frac{r}{1}$   $\frac{2}{2}$      $\frac{g}{6}$   $\frac{3}{3}$   $\frac{s}{s}$   
 E R Z N    F — —. "  
 6    2    2    7

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$17 + 19 =$ _____	$20 + 5 =$ _____
$13 + 15 =$ _____	$14 \times 9 =$ _____
$20 - 19 =$ _____	$18 + 6 =$ _____
$47 + 9 =$ _____	$27 - 15 =$ _____
$7 + 45 =$ _____	$3 \times 30 =$ _____
$24 \times 5 =$ _____	$39 \div 3 =$ _____
$8 \times 15 =$ _____	$12 + 29 =$ _____
$42 \div 6 =$ _____	$16 \times 2 =$ _____
$10 \times 30 =$ _____	$46 \div 2 =$ _____
$28 - 17 =$ _____	$250 - 50 =$ _____

DARTS - FIND THE SCORES FOR EACH PERSON!

NAME	SCORES	TOTAL
HINE	5, 4, 20	
MARY	9, 9, 9	
JAMES	DOUBLE 6, 20, 20	
MIKE	TRIPLE 12, 18, 4	
ESTHER	DOUBLE 6, TRIPLE 4, 3	
LYNDA	DOUBLE 17, 15, 10	
CRAIG	8, 11, 14	
TALA	19, DOUBLE 3, 6	

WHO SCORED THE HIGHEST?

MAGIC

6	1	8
7	5	3
2	9	4

EACH ROW ADDS UP TO \_\_\_\_\_

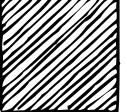
EACH COLUMN ADDS UP TO \_\_\_\_\_

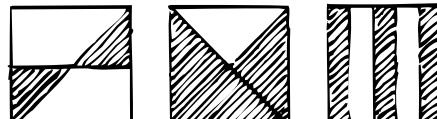
EACH DIAGONAL ADDS UP TO \_\_\_\_\_

## WORDY WHIMS

SUBTRACT 9 FROM 12 \_\_\_\_\_  
 SHARE \$30 BETWEEN 6 \_\_\_\_\_  
 WRITE TWO THOUSAND \_\_\_\_\_  
 24 SUBTRACT 15 \_\_\_\_\_  
 TOTAL OF 9, 4, AND 8 \_\_\_\_\_  
 4 FIVES \_\_\_\_\_  
 8 MORE THAN 7 \_\_\_\_\_  
 DIFFERENCE BETWEEN 9 & 12 \_\_\_\_\_  
 HALF OF 60 \_\_\_\_\_  
 AT NOON IT'S \_\_\_\_\_ O'CLOCK

## RELATIVE RELATIONS

IF  = 20, FIND THE VALUES OF...



NUMBER OF MISTAKES \_\_\_\_\_



# PAWKY PERCENTAGE PAGE

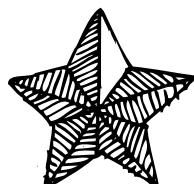
$$\frac{21}{100} = - \% \quad \frac{37}{100} = - \% \quad \frac{43}{100} = - \% \quad \frac{59}{100} = - %$$

$$\frac{94}{100} = \underline{\hspace{2cm}} \% \quad \frac{65}{100} = \underline{\hspace{2cm}} \% \quad \frac{36}{100} = \underline{\hspace{2cm}} \% \quad \frac{15}{100} = \underline{\hspace{2cm}} %$$

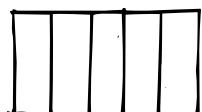
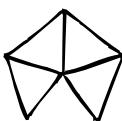
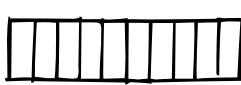
$$\frac{1}{10} = \frac{1}{100} = - \% \quad \frac{9}{10} = \frac{9}{100} = - \% \quad \frac{3}{25} = \frac{3}{100} = - %$$

$$\frac{3}{20} = \frac{1}{100} = -\% \quad \frac{9}{20} = \frac{1}{100} = -\% \quad \frac{3}{50} = \frac{1}{100} = -\%$$

# WHAT PERCENTAGE IS SHADED?



## SHADE IN THE GIVEN PERCENT



$33\frac{1}{3}\%$

70%

40%

10%

80%

# PERCY PIG PERCENTAGE PUZZLES!

HOW DO YOU KNOW WHEN YOU'RE AT PERCY'S?

WHAT DOES THE VET GIVE PERCY FOR HIS SORES?

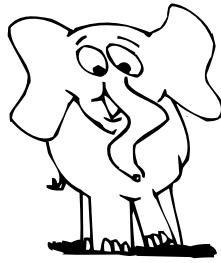
— — — — — — — —  
70 74 55 38 74 56 52 80 55 38 52 9



$$G \frac{17}{100} = -\% \quad T \frac{9}{100} = -\% \quad P \frac{7}{25} = -\% \quad C \frac{94}{100} = -\% \quad Y \frac{2}{10} = -\%$$

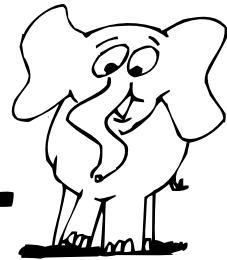
$$S \frac{7}{10} = -\% \quad K \frac{8}{10} = -\% \quad M \frac{11}{20} = -\% \quad L \frac{13}{20} = -\% \quad H \frac{19}{20} = -\%$$

$$N \frac{13}{25} = \% \quad A \frac{21}{25} = \% \quad E \frac{19}{50} = \% \quad I \frac{28}{50} = \% \quad O \frac{37}{50} = %$$



# CRAZY CONVERSIONS

---



% → FRACTION

% → DECIMAL

$$19\% = \frac{19}{100} \quad 20\% = \frac{20}{100} = \frac{1}{5}$$

$$63\% = \frac{63}{100} \quad 40\% = \frac{40}{100} = \frac{2}{5}$$

$$81\% = \frac{81}{100} \quad 50\% = \frac{50}{100} = \frac{1}{2}$$

$$99\% = \frac{99}{100} \quad 75\% = \frac{75}{100} = \frac{3}{4}$$

$$7\% = \frac{7}{100} \quad 85\% = \frac{85}{100} = \frac{17}{20}$$

$$19\% = 0.\underline{\hspace{2mm}} \quad 60\% = \underline{\hspace{2mm}}$$

$$28\% = 0.\underline{\hspace{2mm}} \quad 25\% = \underline{\hspace{2mm}}$$

$$56\% = 0.\underline{\hspace{2mm}} \quad 8\% = \underline{\hspace{2mm}}$$

$$94\% = 0.\underline{\hspace{2mm}} \quad 5\% = \underline{\hspace{2mm}}$$

$$10\% = 0.\underline{\hspace{2mm}} \quad 150\% = \underline{\hspace{2mm}}$$

## IMPORTANT ELEPHANT INFORMATION!

TO UNCOVER SOME IMPORTANT FACTS ABOUT ELEPHANTS,  
EACH LETTER BELOW NEEDS A CONVERSION

$$\boxed{B}=30\% \quad \boxed{C}=23\% \quad \boxed{K}=8\% \quad \boxed{M}=90\% \quad \boxed{R}=35\% \quad \boxed{W}=57\% \quad \boxed{H}=16\%$$

$$\boxed{P}=41\% \quad \boxed{Z}=14\% \quad \boxed{I}=500\% \quad \boxed{G}=28\% \quad \boxed{O}=33\frac{1}{3}\% \quad \boxed{S}=31\% \quad \boxed{E}=50\%$$

$$\boxed{L}=11\% \quad \boxed{A}=60\% \quad \boxed{Q}=40\% \quad \boxed{N}=12\frac{1}{2}\% \quad \boxed{T}=200\% \quad \boxed{V}=66\frac{2}{3}\% \quad \boxed{F}=74\%$$

WHAT DO YOU GIVE TO SICK ELEPHANTS?

$$\overline{2} \quad \overline{20} \quad \overline{\frac{2}{3}} \quad \overline{\frac{1}{8}} \quad \overline{\frac{2}{25}} \quad \overline{4} \quad \overline{\frac{2}{3}} \quad \overline{5} \quad \overline{\frac{11}{100}} \quad \overline{\frac{11}{100}} \quad \overline{5} \quad \overline{14} \quad \overline{5} \quad \overline{\frac{2}{20}} \quad \overline{31}$$

HOW DO YOU MAKE AN ELEPHANT FLY?

$$\overline{.31} \quad \overline{2} \quad \overline{\frac{3}{5}} \quad \overline{\frac{1}{20}} \quad \overline{2} \quad \overline{.57} \quad \overline{5} \quad \overline{2} \quad \overline{\frac{4}{25}} \quad \overline{\frac{3}{5}} \quad \overline{2} \quad \overline{.57} \quad \overline{\frac{1}{3}} \quad \overline{\frac{9}{10}} \quad \overline{.5} \quad \overline{2} \quad \overline{\frac{7}{20}} \quad \overline{.5} \quad \overline{.14} \quad \overline{5} \quad \overline{\frac{41}{100}}$$

WHY DID THE LADY ELEPHANT STOP TAP DANCING?

$$\overline{.31} \quad \overline{\frac{4}{25}} \quad \overline{.5} \quad \overline{\frac{37}{50}} \quad \overline{5} \quad \overline{\frac{11}{100}} \quad \overline{\frac{11}{100}} \quad \overline{5} \quad \overline{\frac{1}{8}} \quad \overline{2} \quad \overline{\frac{1}{3}} \quad \overline{2} \quad \overline{\frac{4}{25}} \quad \overline{5} \quad \overline{.31} \quad \overline{5} \quad \overline{\frac{1}{8}} \quad \overline{\frac{3}{25}}$$

WHAT DO YOU GET IF YOU CROSS A KANGAROO & ELEPHANT?

$$\overline{.3} \quad \overline{5} \quad \overline{\frac{1}{25}} \quad \overline{\frac{4}{25}} \quad \overline{\frac{1}{3}} \quad \overline{\frac{11}{100}} \quad \overline{.5} \quad \overline{.31} \quad \overline{\frac{3}{5}} \quad \overline{.23} \quad \overline{\frac{7}{20}} \quad \overline{\frac{1}{3}} \quad \overline{.31} \quad \overline{.31} \quad \overline{\frac{3}{5}} \quad \overline{\frac{2}{3}} \quad \overline{.31} \quad \overline{2} \quad \overline{\frac{7}{20}} \quad \overline{\frac{3}{5}} \quad \overline{\frac{11}{100}} \quad \overline{5} \quad \overline{\frac{3}{5}}$$

# -GIVING 100 PERCENT!

... ALL DA TIME!

$$\frac{3}{10} = \underline{\hspace{2cm}} \% \quad \frac{13}{100} = \underline{\hspace{2cm}} \% \quad \frac{1}{50} = \underline{\hspace{2cm}} \% \quad \frac{11}{50} = \underline{\hspace{2cm}} \%$$

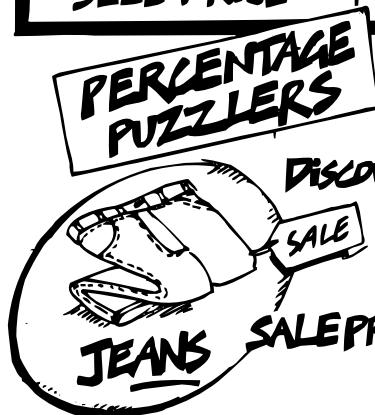
$$\frac{1}{20} = \underline{\hspace{2cm}} \% \quad \frac{9}{20} = \underline{\hspace{2cm}} \% \quad \frac{1}{25} = \underline{\hspace{2cm}} \% \quad \frac{9}{25} = \underline{\hspace{2cm}} \%$$

$$16\% = 0.\underline{\hspace{2cm}} \quad 35\% = 0.\underline{\hspace{2cm}} \quad 42\% = 0.\underline{\hspace{2cm}} \quad 81\% = 0.\underline{\hspace{2cm}}$$

$$6\% = 0.\underline{\hspace{2cm}} \quad 5\% = 0.\underline{\hspace{2cm}} \quad 2\% = 0.\underline{\hspace{2cm}} \quad 1\% = 0.\underline{\hspace{2cm}}$$

PROFIT is \_\_\_\_\_

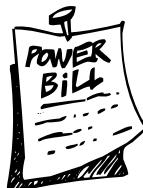
COST PRICE	\$4	\$9	\$15	\$60	\$80
% PROFIT	50%	50%	100%	25%	10%
REAL PROFIT					
SELL PRICE					



SHOP PRICE - \$75

DISCOUNT = 20% of \$75  
 $= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$   
 $= \$ \underline{\hspace{2cm}}$

JEANS SALE PRICE = \$ \_\_\_\_\_



534 UNITS USED.

COST PER UNIT  
 is 6 cents  
 ELECTRIC ACCOUNT = \$ \_\_\_\_\_  
 $+ 12.5\% \text{ G.S.T} = \$ \underline{\hspace{2cm}}$   
 FINAL BILL = \$ \_\_\_\_\_

-PUZZLE  
TIME!

COST PRICE	50c	40c	100c	200c
% LOSS	K	N	45%	30%
REAL LOSS	25c	10c	0	L

S  $\frac{57}{100}$

I 40%

E 28%

B  $\frac{18}{50}$

J 1%

R 23%

A 100%

T 10%

ALWAYS GIVE 100%

$\overline{25\%}$   $\overline{45\%}$   $\overline{1}$

$\overline{60\%}$   $\overline{\frac{2}{5}}$   $\overline{50\%}$   $\overline{\frac{1}{25}}$

$\overline{.36}$   $\overline{1}$

$\overline{.23}$   $\overline{1}$

$\overline{.57}$

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{rcl} 8 + 3 = & \underline{\hspace{2cm}} \\ 8 - 3 = & \underline{\hspace{2cm}} \\ 4 \times 7 = & \underline{\hspace{2cm}} \\ 12 \div 4 = & \underline{\hspace{2cm}} \\ 7 + 9 = & \underline{\hspace{2cm}} \\ 11 - 5 = & \underline{\hspace{2cm}} \\ 6 \times 6 = & \underline{\hspace{2cm}} \\ 9 \div 1 = & \underline{\hspace{2cm}} \\ 7 - 0 = & \underline{\hspace{2cm}} \\ 4 - 4 = & \underline{\hspace{2cm}} \end{array}$$

## DANDY DECIMALS

$$\begin{array}{rcl} 0.5 + 0.2 = & \underline{\hspace{2cm}} \\ 0.4 + 0.4 = & \underline{\hspace{2cm}} \\ 0.5 - 0.2 = & \underline{\hspace{2cm}} \\ 0.4 - 0.4 = & \underline{\hspace{2cm}} \\ 1.3 + 0.6 = & \underline{\hspace{2cm}} \\ 1.9 - 0.6 = & \underline{\hspace{2cm}} \\ 4 \times 0.1 = & \underline{\hspace{2cm}} \\ 5 \times 0.3 = & \underline{\hspace{2cm}} \\ \frac{0.6}{3} = & \underline{\hspace{2cm}} \quad \frac{1.2}{3} = & \underline{\hspace{2cm}} \end{array}$$

## RADICAL ROMANS

II =	<u>      </u>
IV =	<u>      </u>
VI =	<u>      </u>
IX =	<u>      </u>
XV =	<u>      </u>
<u>      </u> = 5	<u>      </u>
<u>      </u> = 10	<u>      </u>
<u>      </u> = 13	<u>      </u>
<u>      </u> = 21	<u>      </u>
<u>      </u> = 25	<u>      </u>

8

## EXTRA EXAMPLES

$$\begin{array}{rcl} 321 + 200 = & \underline{\hspace{2cm}} \\ 400 + 400 = & \underline{\hspace{2cm}} \\ 300 - 165 = & \underline{\hspace{2cm}} \\ 400 - 120 = & \underline{\hspace{2cm}} \\ 60 \times 5 = & \underline{\hspace{2cm}} \\ 38 \times 10 = & \underline{\hspace{2cm}} \\ 70 \div 7 = & \underline{\hspace{2cm}} \\ 1500 \div 10 = & \underline{\hspace{2cm}} \\ 444 + 555 = & \underline{\hspace{2cm}} \\ 651 - 156 = & \underline{\hspace{2cm}} \end{array}$$

## THE QUINTUS QUIZ

I LEFT HOME AT \_\_\_\_\_  
 IT TOOK \_\_\_\_\_ MINUTES TO  
 GET TO SCHOOL. SCHOOL WENT  
 FOR \_\_\_\_\_ HOURS. SUPPER  
 WAS AT \_\_\_\_\_ TODAY. I WAS  
 OUT OF BED FOR \_\_\_\_\_ HOURS.

-TUESDAY-

OUT OF BED	7.00 AM.
LEFT HOME	8.30
GO TO SCHOOL	9.00
SCHOOL FINISHED	4.00
ARRIVED HOME	4.20
SUPPERTIME	8.45
INTO MY BED	11.00

NUMBER OF MISTAKES \_\_\_\_\_

# QUOTE-A-BILL QUANTITIES

A DISCOUNT IS \_\_\_\_\_



$$\begin{aligned} \text{SHOP PRICE} &= \$60 \\ \text{DISCOUNT} &= 10\% \text{ of } \$60 \\ &= \underline{\quad} \times \underline{\quad} \\ \text{SALE PRICE} &= \underline{\quad} = \underline{\quad} \end{aligned}$$



$$\begin{aligned} \text{SHOP PRICE} &= \$42 \\ \text{DISCOUNT} &= 50\% \text{ of } \$42 \\ &= \frac{1}{2} \times \underline{\quad} \\ \text{SALE PRICE} &= \underline{\quad} = \underline{\quad} \end{aligned}$$

DO THE CALCULATIONS TO COMPLETE THIS TABLE!

ORIGINAL PRICE	BIKE \$250	HAT \$12	BOOK \$40	TAPE \$10	HOLIDAY \$800	SOCKS \$5
% DISCOUNT	20%	25%	10%	30%	5%	40%
AMOUNT OF DISCOUNT						
SALE PRICE						

G.S.T. IS \_\_\_\_\_

$$\begin{aligned} \text{PHONE RENTAL} &= \$30 \\ \text{TOLL ACCOUNT} &= \$18 \\ \text{TOTAL} &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} + 12.5\% \text{ G.S.T.} &= \$ \underline{\quad} \\ \text{FINAL BILL} &= \$ \underline{\quad} \end{aligned}$$

$$\begin{aligned} \text{GAS ACCOUNT} &= \$13 \\ \text{SERVICE FEE} &= \$7 \\ \text{TOTAL} &= \underline{\quad} \end{aligned}$$

$$\begin{aligned} + 12.5\% \text{ G.S.T.} &= \$ \underline{\quad} \\ \text{FINAL BILL} &= \$ \underline{\quad} \end{aligned}$$

COMPLETE THE TABLE TO UNCOVER A SAD QUOTE!

ACCOUNT	16c	56c	\$24	80c	\$32	72c	\$40	\$88
+12.5% G.S.T.	S	A	V	L	K	B	M	G
TOTAL BILL	F	I	R	V	E	O	T	N

"----- ----- ----- ----- ----- ----- ----- ----- ----- !"  
 81 3 36 27 63 99 18 10 7 45 63 81 99 57 436 2 81 99 36 11 81 99 0 2 45

## -MORE ON PERCENT-

LANA GOT 40 MARKS OUT OF 80. SHE SCORED \_\_\_\_\_ %

GANA GOT 37 MARKS OUT OF 50. SHE SCORED \_\_\_\_\_ %

SITU GOT 19 MARKS OUT OF 25. SHE SCORED \_\_\_\_\_ %

FITU GOT 8 MARKS OUT OF 10. SHE SCORED \_\_\_\_\_ %

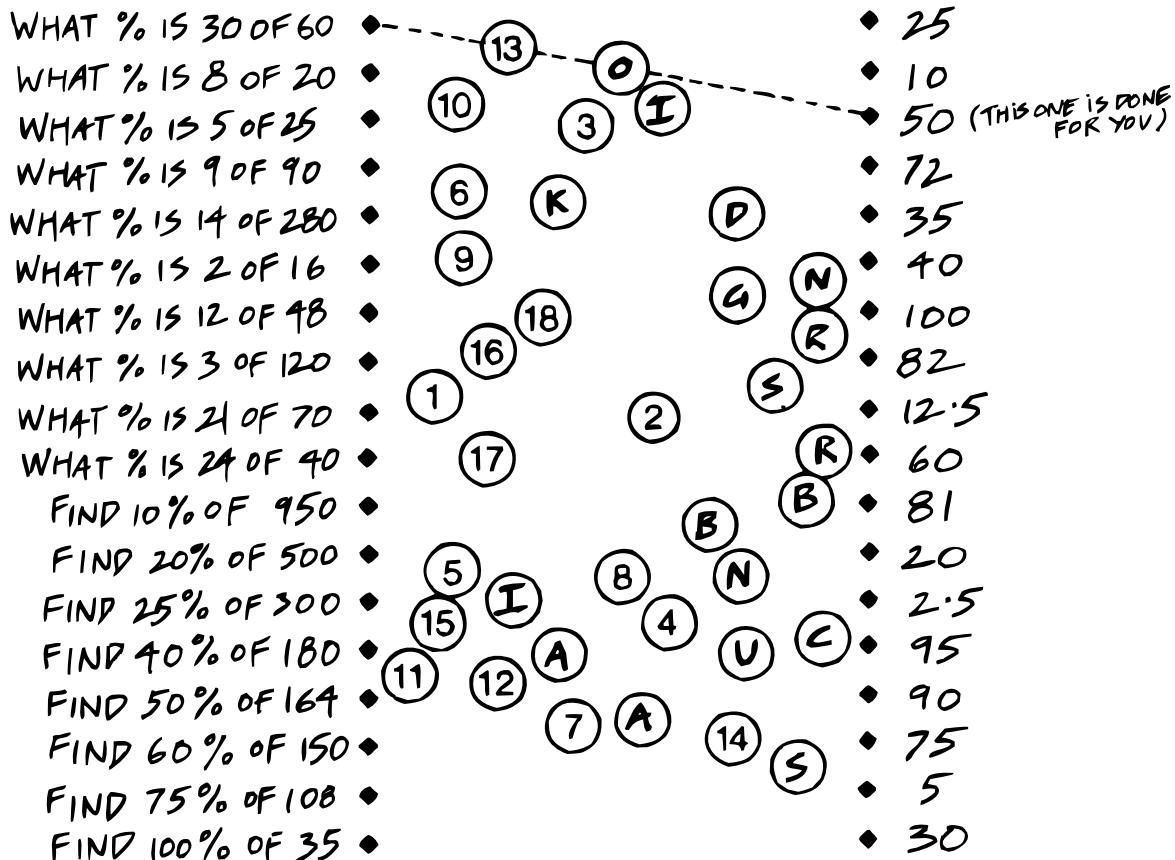
WHOSE RESULT WAS THE BEST? \_\_\_\_\_

ANNA KEPT A RECORD OF HER EARNINGS AND SAVINGS FOR THE 5 WEEKS SHE WORKED.

COMPLETE HER TABLE!

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
EARNINGS	\$100	\$90	\$120	\$80	\$150
SAVINGS	\$48	\$45	\$66	\$32	\$60
% SAVED					

NOW LINE UP EACH SUM WITH ITS CORRECT ANSWER TO COMPLETE THE SENTENCE!



THE SAW-DOCTOR'S JOURNEY INTO AFRICA WAS TO...

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
....																	

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{rcl} 3 + 2 = & \underline{\hspace{2cm}} \\ 10 - 5 = & \underline{\hspace{2cm}} \\ 4 \times 1 = & \underline{\hspace{2cm}} \\ 9 \div 3 = & \underline{\hspace{2cm}} \\ 6 + 4 = & \underline{\hspace{2cm}} \\ 8 - 7 = & \underline{\hspace{2cm}} \\ 5 \times 5 = & \underline{\hspace{2cm}} \\ 6 \div 2 = & \underline{\hspace{2cm}} \\ 7 - 4 = & \underline{\hspace{2cm}} \\ 9 - 3 = & \underline{\hspace{2cm}} \end{array}$$



## MONEY MIXTURES

$$\begin{array}{rcl} 10c + 20c = & \underline{\hspace{2cm}} \\ 20c + 50c = & \underline{\hspace{2cm}} \\ 55c - 15c = & \underline{\hspace{2cm}} \\ 20c - 20c = & \underline{\hspace{2cm}} \\ 4 \times 20c = & \underline{\hspace{2cm}} \\ 5 \times 50c = & \underline{\hspace{2cm}} \\ \$3 + \$7 = & \underline{\hspace{2cm}} \\ \$7 - \$3 = & \underline{\hspace{2cm}} \\ \$7 \times 8 = & \underline{\hspace{2cm}} \\ \$20 \div 4 = & \underline{\hspace{2cm}} \end{array}$$

## VISCOUS VARIABLES

$$\begin{array}{rcl} k + k = & \underline{\hspace{2cm}} \\ l - l = & \underline{\hspace{2cm}} \\ 3m + m = & \underline{\hspace{2cm}} \\ 5n + 2n = & \underline{\hspace{2cm}} \\ 4p + 3p = & \underline{\hspace{2cm}} \\ 3q - q = & \underline{\hspace{2cm}} \\ 5r - 2r = & \underline{\hspace{2cm}} \\ 2s + 2s = & \underline{\hspace{2cm}} \\ t + t + t = & \underline{\hspace{2cm}} \\ 3u - 3u = & \underline{\hspace{2cm}} \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{rcl} 200 + 145 = & \underline{\hspace{2cm}} \\ 300 + 400 = & \underline{\hspace{2cm}} \\ 200 - 110 = & \underline{\hspace{2cm}} \\ 100 - 63 = & \underline{\hspace{2cm}} \\ 60 \times 2 = & \underline{\hspace{2cm}} \\ 70 \times 3 = & \underline{\hspace{2cm}} \\ 40 \div 4 = & \underline{\hspace{2cm}} \\ 50 \div 10 = & \underline{\hspace{2cm}} \\ 222 + 222 = & \underline{\hspace{2cm}} \\ 435 - 135 = & \underline{\hspace{2cm}} \end{array}$$

## THE QUINTUS QUIZ

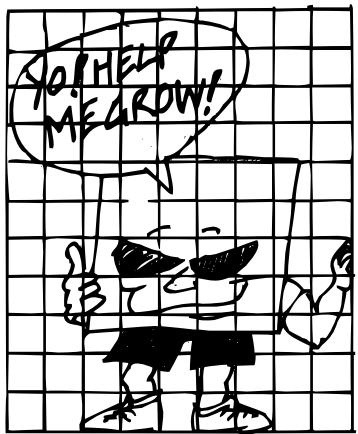
- HOW MANY DAYS IN MAY? \_\_\_\_\_
- WHAT DAY IS APRIL 23rd? \_\_\_\_\_
- WHAT DATE IS THE FIRST WEDNESDAY OF MAY? \_\_\_\_\_
- WHAT DATE IS THE THIRD SUNDAY OF APRIL? \_\_\_\_\_
- HOW MANY TUESDAYS IN APRIL? \_\_\_\_\_

APRIL						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

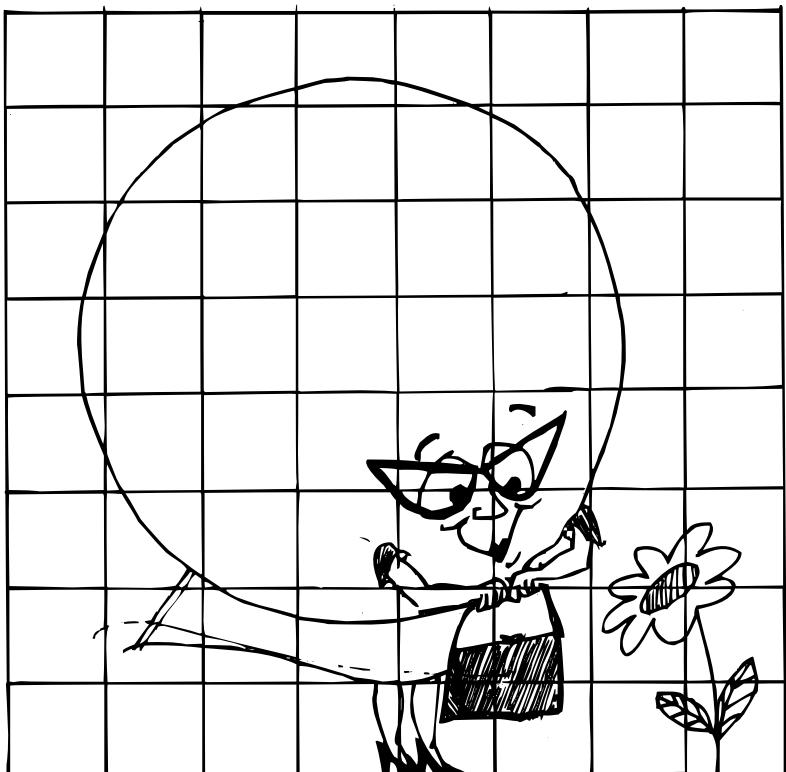
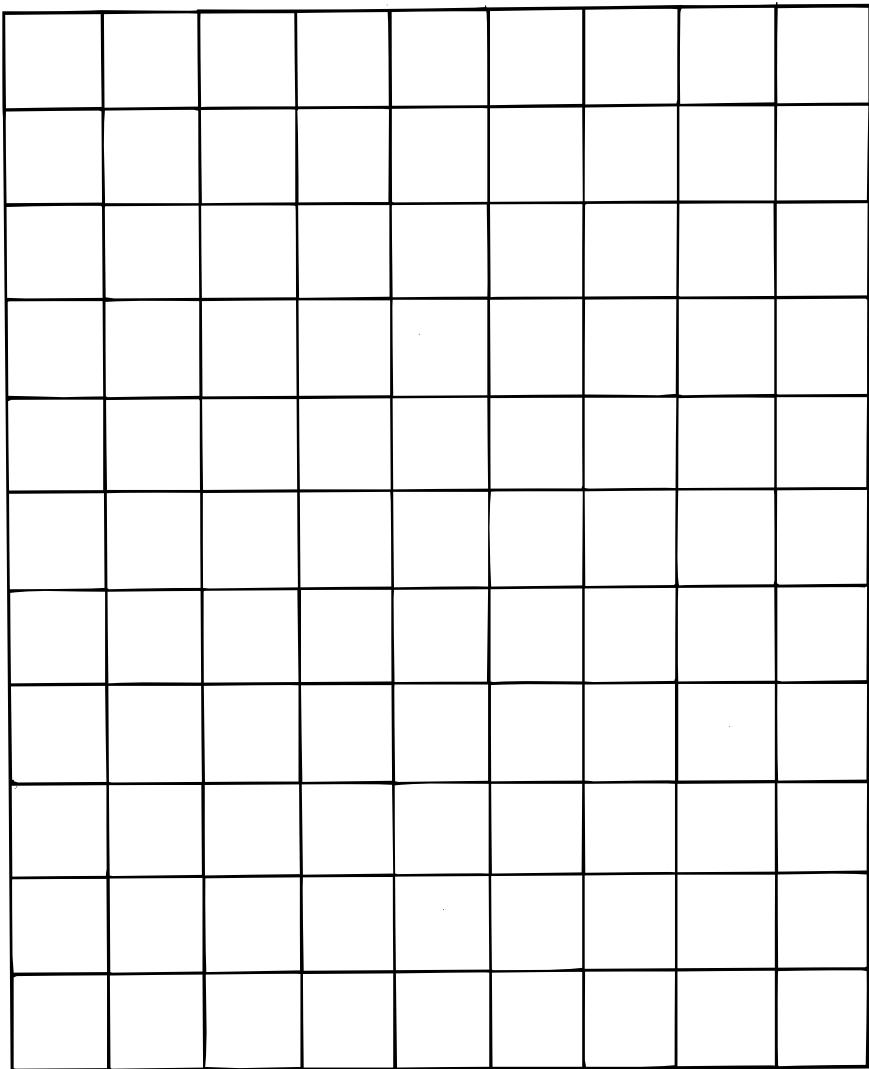
MAY						
M	T	W	T	F	S	S
			1	2	3	4
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NUMBER OF MISTAKES \_\_\_\_\_

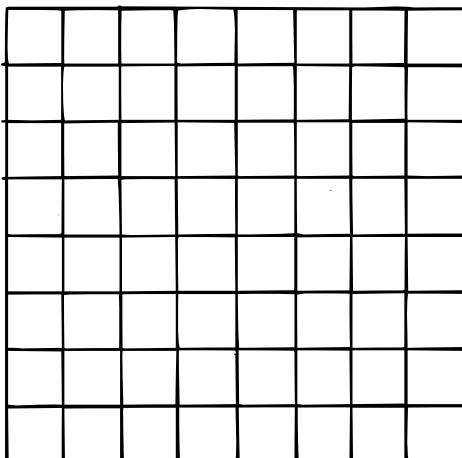
# ENLARGEMENT



USE THE GRID  
TO ENLARGE  
STANLEY  
SQUARE!

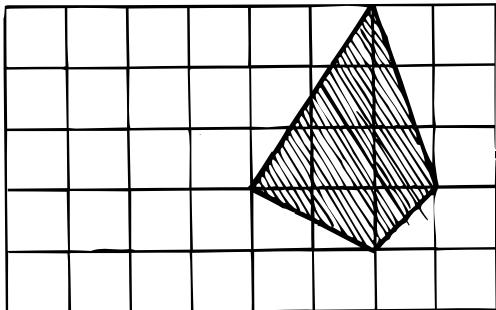


NOW USE THE GRID  
TO MAKE SUZY  
SMALLER!

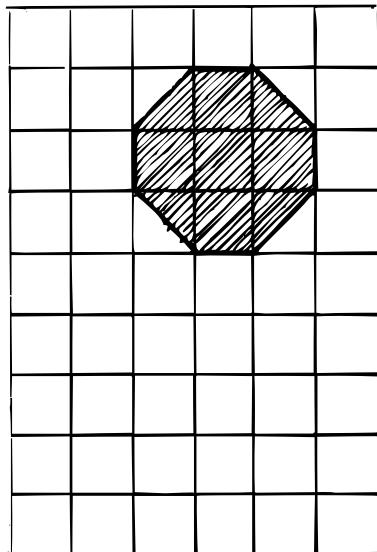


# TRANSLATIONS

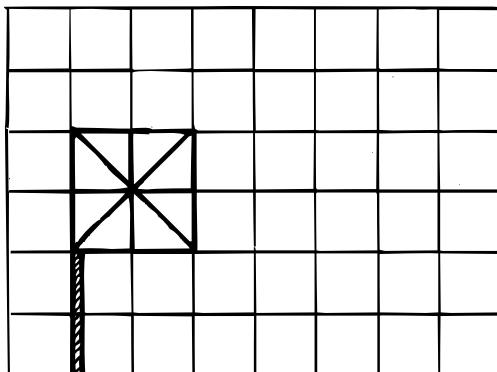
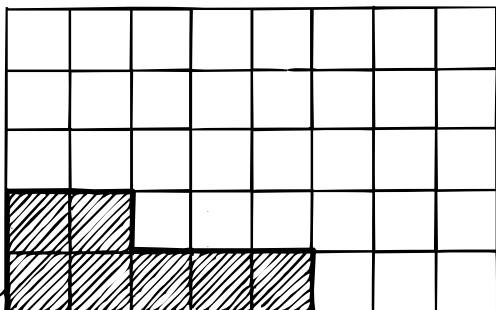
TRANSLATE 4 UNITS TO THE LEFT.



TRANSLATE  
3 UNITS  
DOWN.



TRANSLATE 2 UNITS TO THE RIGHT.



TRANSLATE 2 UNITS UP &  
3 UNITS RIGHT.

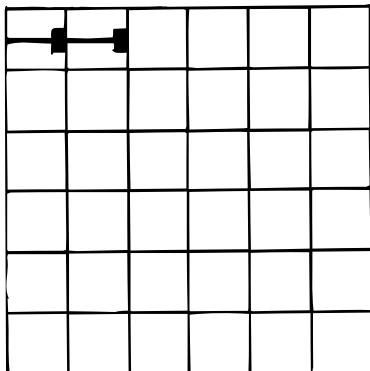
PROPERTIES Fill in all the gaps!

TRANSLATION	HOW DO WE DO IT?	DOES THE SIZE CHANGE?	DOES THE SHAPE CHANGE?	DO ALL POINTS MOVE?
REFLECTION				
ROTATION				
TRANSLATION				
ENLARGEMENT				

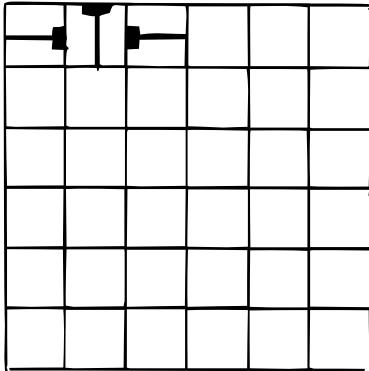
# PATTERNS USING TRANSFORMERS - FILL IN EACH GRID!



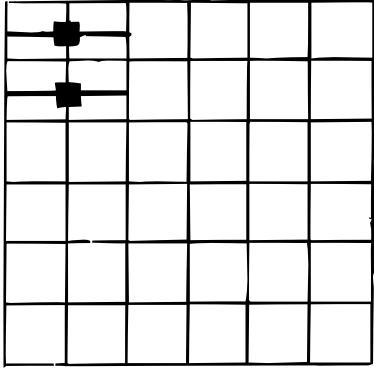
TRANSLATE



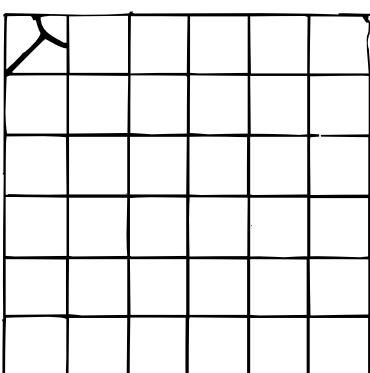
ROTATE 90°



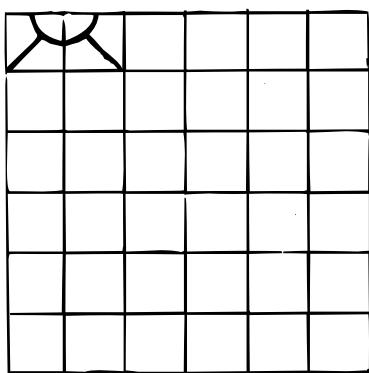
REFLECT



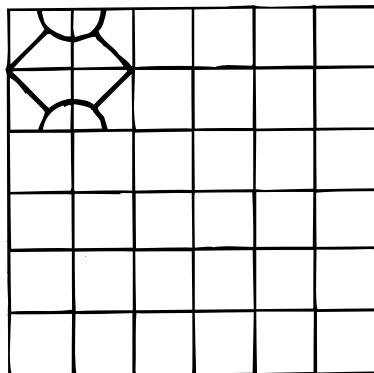
TRANSLATE



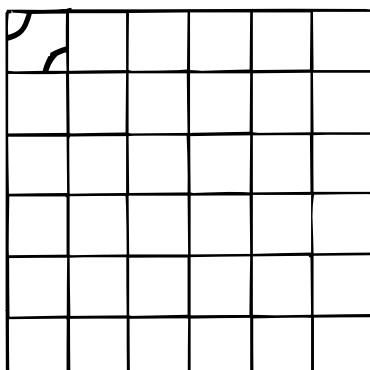
ROTATE 90°



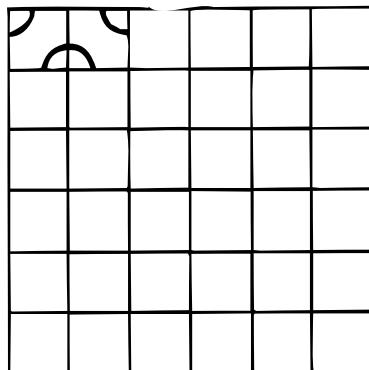
REFLECT



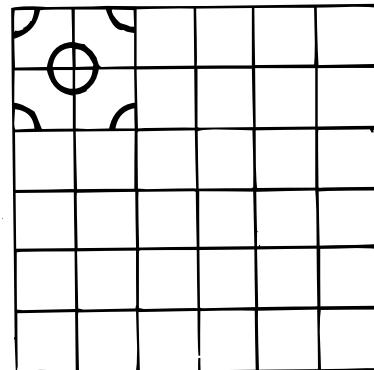
TRANSLATE



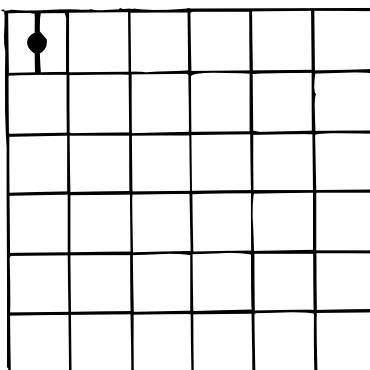
ROTATE 90°



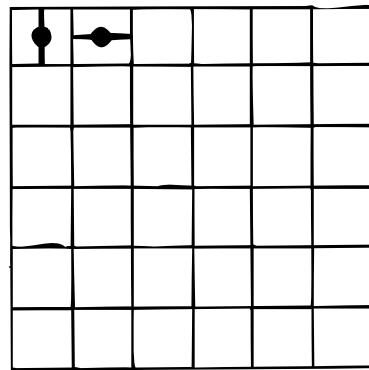
REFLECT



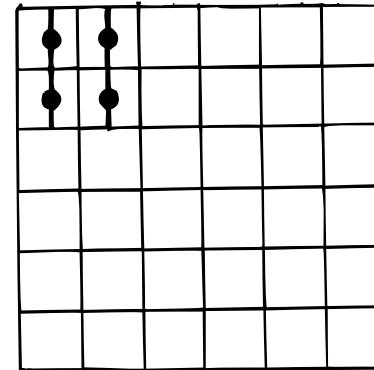
TRANSLATE



ROTATE 90°

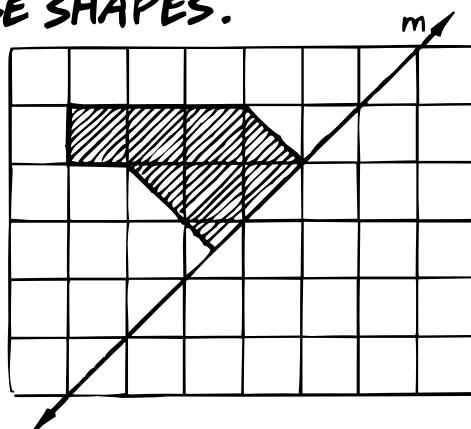
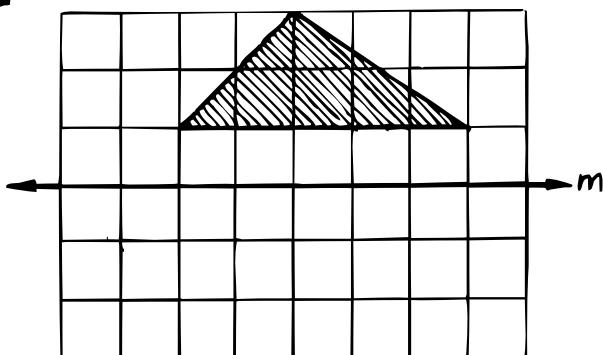


REFLECT

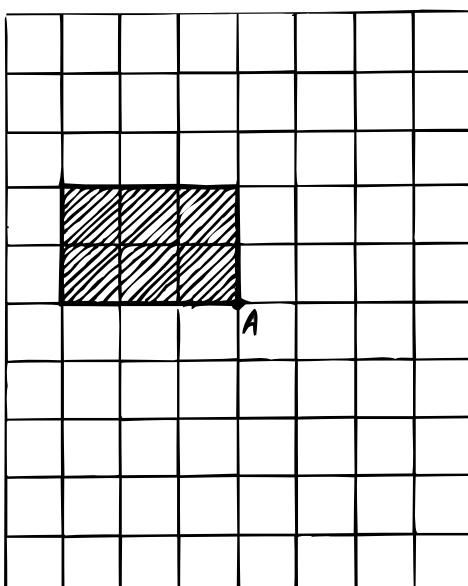


# TIME TO TRANSFORM!

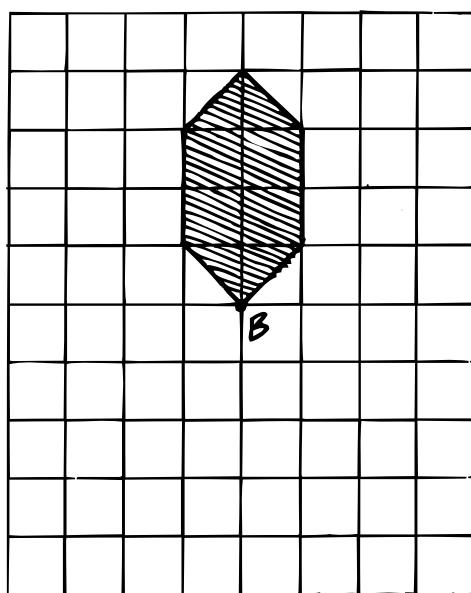
- 1 DRAW THE REFLECTIONS OF THESE SHAPES.



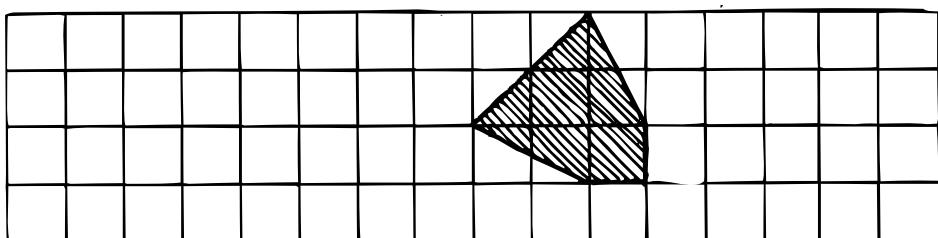
- 2 ROTATE THE SHAPE  
CLOCKWISE  $90^\circ$  ABOUT A.



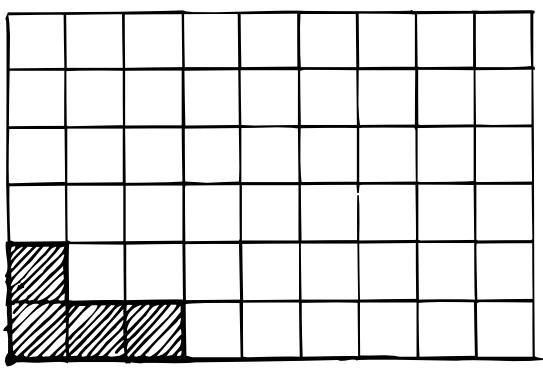
- 3 ROTATE THE SHAPE  $180^\circ$   
ABOUT B.



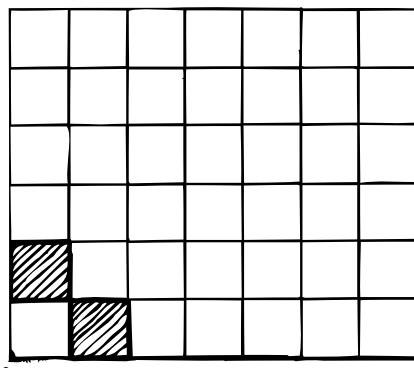
- 4 TRANSFORM  
4 UNITS TO  
THE LEFT.



- 5 ENLARGE THE SHAPE SO  
IT IS 2 TIMES BIGGER.



- 6 ENLARGE THE SHAPE  
SO IT IS 3 TIMES BIGGER.



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{l} 5 + 3 = \underline{\quad} \\ 10 - 4 = \underline{\quad} \\ 6 \times 8 = \underline{\quad} \\ 4 \div 4 = \underline{\quad} \\ 7 + 2 = \underline{\quad} \\ 8 - 3 = \underline{\quad} \\ 5 \times 5 = \underline{\quad} \\ 6 \div 3 = \underline{\quad} \\ 9 - 7 = \underline{\quad} \\ 5 - 1 = \underline{\quad} \end{array}$$

## TRENDY TABLES

$$\begin{array}{l} 4 \times 1 = \underline{\quad} \\ 4 \times 2 = \underline{\quad} \\ 4 \times 3 = \underline{\quad} \\ 4 \times \underline{\quad} = 16 \\ 4 \times \underline{\quad} = 20 \\ 4 \times \underline{\quad} = 32 \\ 4 \times 9 = \underline{\quad} \\ 4 \times 10 = \underline{\quad} \\ 4 \times \underline{\quad} = 48 \\ 4 \times \underline{\quad} = 60 \end{array}$$



## SOFT SUBSTITUTES

$$\begin{array}{l} k = 7, k + 3 = \underline{\quad} \\ l = 8, l + 11 = \underline{\quad} \\ m = 4, m - 2 = \underline{\quad} \\ n = 9, n - 5 = \underline{\quad} \\ p = 2, 8 + p = \underline{\quad} \\ r = 3, 7 - r = \underline{\quad} \\ s = 5, 8s = \underline{\quad} \\ t = 6, 3t = \underline{\quad} \\ u = 1, 5u = \underline{\quad} \\ v = 10, 6v = \underline{\quad} \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{l} 32 \text{ ADDED TO } 9 \text{ IS } \underline{\quad} \\ 13 \text{ TIMES } 5 \text{ IS } \underline{\quad} \\ \$5.40 + \$2.55 = \underline{\quad} \\ \$8.65 + \$9.70 = \underline{\quad} \\ 829 = \underline{\quad} + 20 + 9 \\ 700 + 40 + 3 = \underline{\quad} \\ 230 + 142 = \underline{\quad} \\ 175 + 251 = \underline{\quad} \\ 250 - 140 = \underline{\quad} \\ 177 - 33 = \underline{\quad} \end{array}$$

## THE QUINTUS QUIZ

-FIND THE COST FOR...

2 PARENTS ONLY           

3 PARENTS & 1 STUDENT           

1 PARENT & 1 VISITOR           

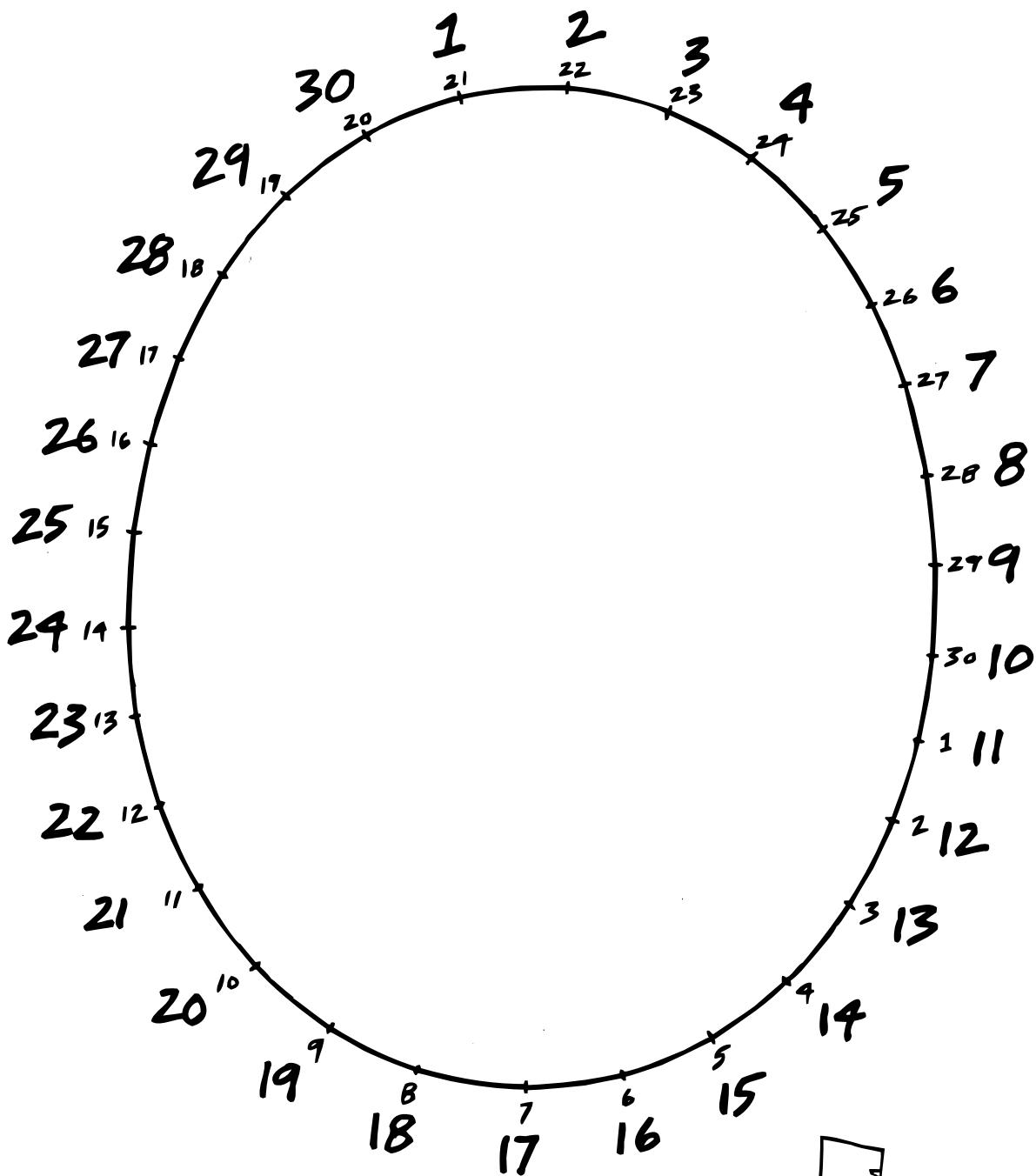
1 PARENT & 3 STUDENTS           

2 PARENTS & 2 VISITORS           



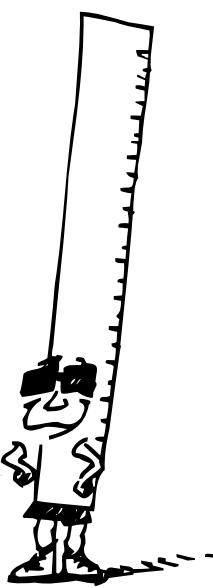
NUMBER OF MISTAKES

# "EYE IN THE SKY!"



JOIN THE BIG NUMBERS  
TO THE SAME LITTLE  
NUMBERS TO COMPLETE  
THE DESIGN!

YOU'LL NEED RODNEY  
RULER TO HELP YOU!



PUT A +, -, × OR ÷ SIGN IN EACH □ TO MAKE THE EQUATIONS CORRECT!

$5 \square (3+5) = 13$

$9-9 = 8 \square 8$

$6 \div 2 \square 3 = 9$

$10 \square (2 \times 5) = 1$

$16+8 = 8 \square 3$

$15 \times 6 \square 3 = 30$

$36 \square (4 \times 3) = 48$

$8 \div 8 = 9 \square 9$

$6 \times 4 \square 3 = 21$

$9 \square (12-6) = 3$

$36 \div 4 = 7 \square 2$

$9+8 \square 7 = 10$

$12 \square (8 \div 2) = 48$

$3 \times 10 = 6 \square 5$

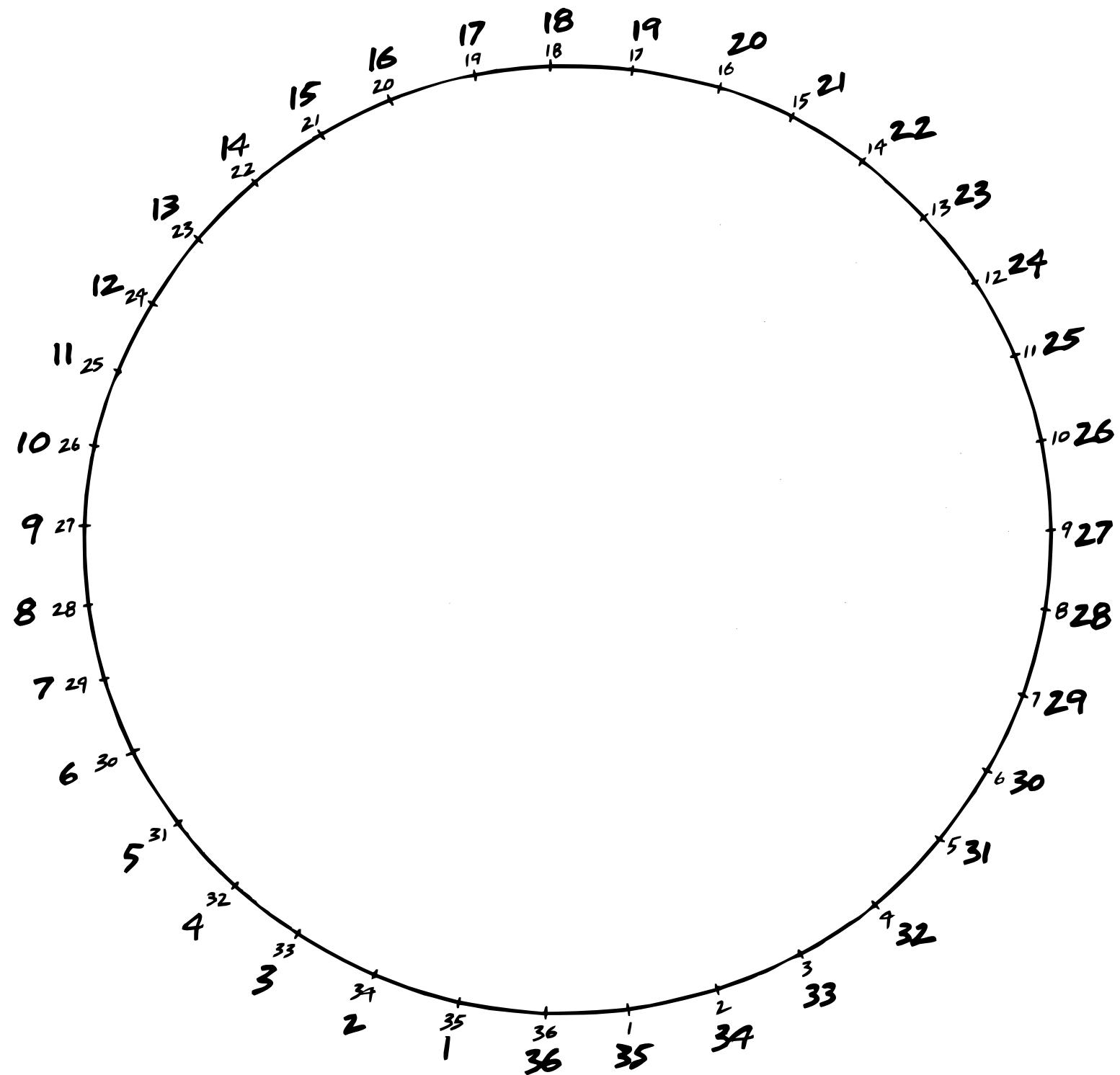
$3 \times 4 \square 2 = 24$

## CROSS NUMBER PUZZLE

		$60 \div 10 =$		$+ 66 -$		$= 72 \div 8 =$		
$+$		$\div$	$\div$	$\times$		$\div$	$\times$	$\div$
$1$		$15 \div$		$=$		$\div 7 =$	$6 \div$	$= 2$
$=$		$=$	$=$	$=$	$=$	$\times$	$=$	$=$
$8$	$\div$	$=$		$18 \div$	$=$		$- 3 =$	
				$\times$	$=$			$\div$
	$\div$	$8 = 6$		$9 + 42 -$	$=$	$8 +$	$= 9$	
$\div$	$\times$			$=$			$=$	$=$
$4$	$\times$	$7 =$	$- =$	$+ 5 =$		$40 -$	$=$	
$=$	$=$			$-$		$\div$	$\div$	$+$
		$- 2 =$		$96 \div 8 =$		$+ 7 =$		
$+$			$\div$	$=$			$=$	$=$
	$24$	$90 \div 9 =$		$+ 50 +$	$=$		$5$	
$=$	$\div$	$=$				$\div$		$-$
	$+$	$= 43$	$-$	$+ 29 =$		$56 \div 8 =$	$=$	
<b>CHRIS</b>	$=$	$-$		$\div$		$=$	$+$	$=$
<b>CROSS</b>	$4 +$	$= 22$	$49 \div 7 =$			$=$	$+ 9 =$	
	$=$		$=$	$=$			$=$	
		$- 12 -$	$=$	$=$	$=$	$\times 2 =$		



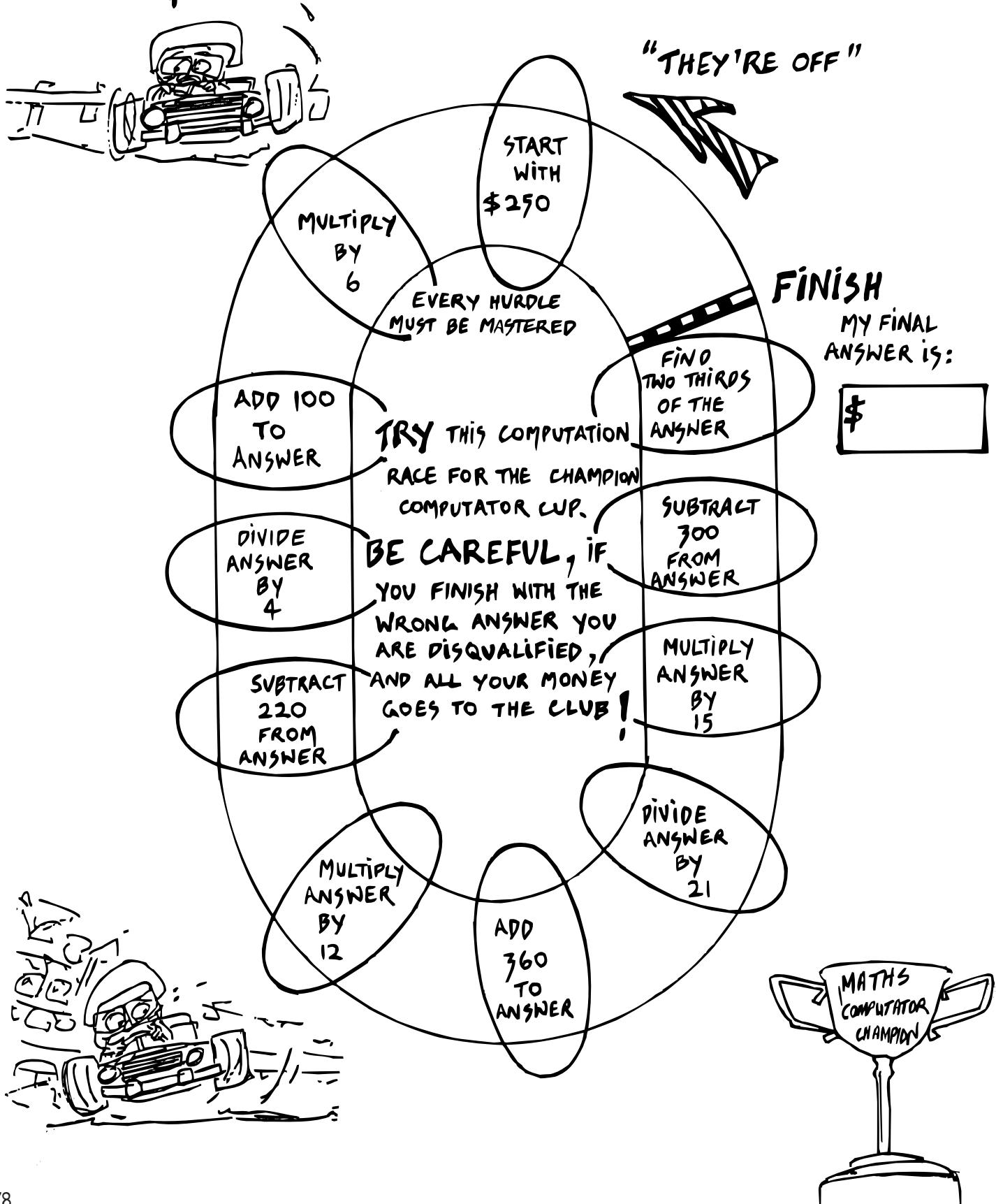
# TIME TO 'DOUBLE-UP!'



START AT 1 WITH THE LITTLE NUMBERS, AND JOIN EACH NUMBER TO ITS DOUBLE, eg JOIN 1 WITH 2, 2 WITH 4, 3 WITH 6 etc. NOW REPEAT WITH THE BIG NUMBERS.  
COLOUR YOUR DESIGN. IT IS CALLED A CARDIOID!

# THE COMPUTATION CHALLENGE.

\$250 TO INVEST. HOW MUCH DO YOU WIN?



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{l} 9 + 5 = \underline{\quad} \\ 9 - 5 = \underline{\quad} \\ 8 \times 9 = \underline{\quad} \\ 10 \div 2 = \underline{\quad} \\ 7 + 6 = \underline{\quad} \\ 8 - 8 = \underline{\quad} \\ 7 \times 6 = \underline{\quad} \\ 3 \div 3 = \underline{\quad} \\ 10 - 7 = \underline{\quad} \\ 10 - 0 = \underline{\quad} \end{array}$$

## MIGHTY METRICS

$$\begin{array}{l} 40\text{m} + 80\text{m} = \underline{\quad} \\ 37\text{cm} + 17\text{cm} = \underline{\quad} \\ 52\text{m} - 32\text{m} = \underline{\quad} \\ 61\text{mm} - 45\text{mm} = \underline{\quad} \\ \underline{\quad}\text{cl} = 1\text{l} \\ \underline{\quad}\text{cl} = 3\text{l} \\ 1000\text{mg} = \underline{\quad}\text{g} \\ 2000\text{mg} = \underline{\quad}\text{g} \\ \underline{\quad}\text{m} = 5.678\text{ km} \\ 8567\text{ m} = \underline{\quad}\text{km} \end{array}$$

## THE QUINTUS QUIZ —FIND THE COST OF...

$$\begin{array}{l} 9 \text{ PENCILS } \underline{\quad} \\ 4 \text{ FELT TIPS } \underline{\quad} \\ 6 \text{ BIROS } \underline{\quad} \\ 9 \text{ PENCILS & 1 RULER } \underline{\quad} \\ 4 \text{ FELT TIPS, 6 BIROS,} \\ \text{ & 1 RULER } \underline{\quad} \end{array}$$

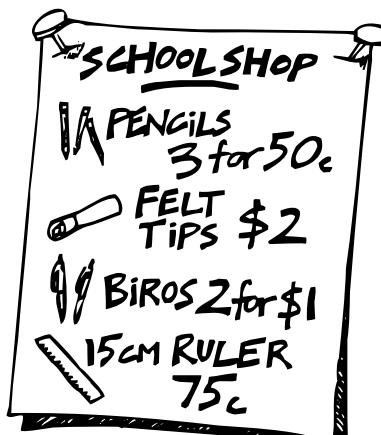
## FANTASTIC FRACTIONS

$$\begin{array}{l} \frac{1}{2} \text{ OF } 4 = \underline{\quad} \\ \frac{1}{2} \text{ OF } 8 = \underline{\quad} \\ \frac{1}{2} \text{ OF } 16 = \underline{\quad} \\ \frac{1}{2} \text{ OF } 30 = \underline{\quad} \\ \frac{1}{3} \times \frac{1}{3} = \underline{\quad} \\ \frac{2}{5} \times \frac{3}{7} = \underline{\quad} \\ \frac{1}{3} + \frac{1}{3} = \underline{\quad} \\ \frac{2}{5} + \frac{2}{5} = \underline{\quad} \\ \frac{1}{3} - \frac{1}{3} = \underline{\quad} \\ \frac{1}{4} - \frac{1}{4} = \underline{\quad} \end{array}$$



## EXTRA EXAMPLES

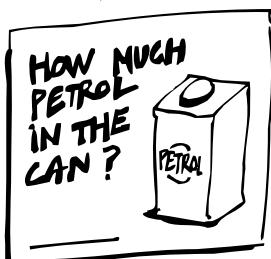
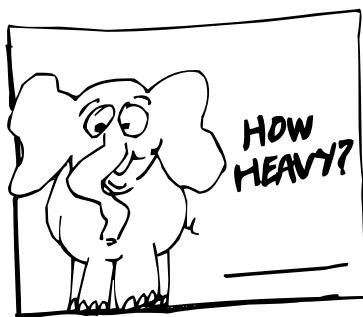
$$\begin{array}{l} \underline{\quad} \text{ DAYS IN 1 FORTNIGHT} \\ 300 \text{ sec} = \underline{\quad} \text{ MINUTES} \\ 0.9 + 0.9 = \underline{\quad} \\ 1.3 - 0.7 = \underline{\quad} \\ 0.3 \times 9 = \underline{\quad} \\ 0.9 \div 3 = \underline{\quad} \\ 16, 8, \underline{\quad}, 2, 1 \\ 407 + 704 = \underline{\quad} \\ 862 - 145 = \underline{\quad} \\ 3^2 = \underline{\quad} \end{array}$$



NUMBER OF MISTAKES

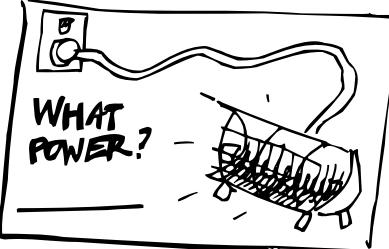
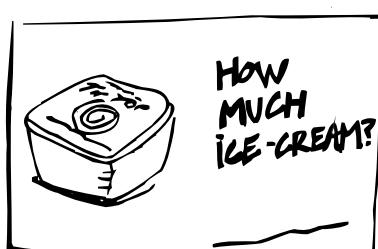
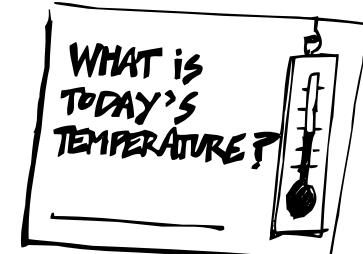
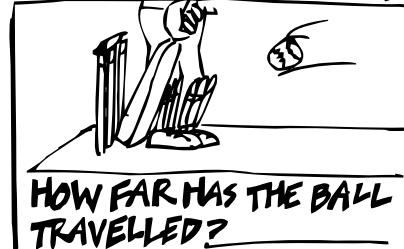
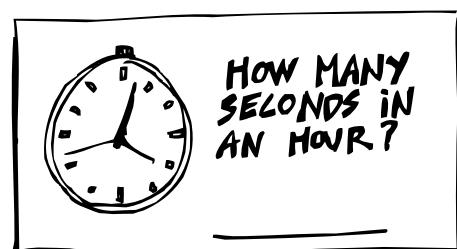
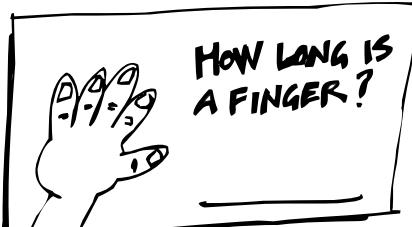
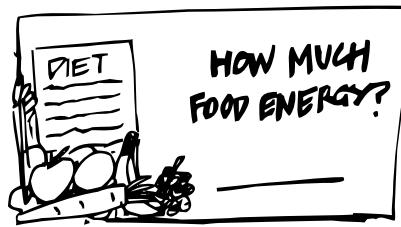
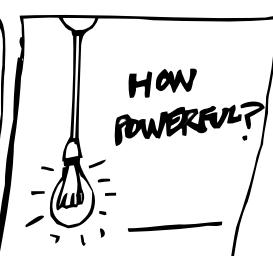
# - KNOW MY METRICS -

CHOOSE AN ANSWER  
FROM THE BOTTOM OF  
THE PAGE FOR EACH  
OF THE MEASUREMENTS!



HOW MANY MATCHES IN THE BOX?

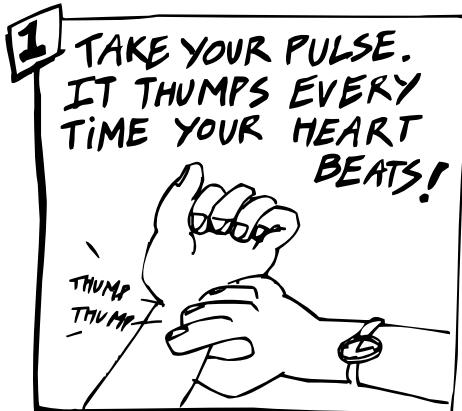
HOW MUCH VANILLA ESSENCE IN THE BOTTLE?



## ANSWERS

1ml 4500m 21kg 2l 30cm 18°C 30L 51J  
 760g 800sec 1500W 8000 kJ 28ml 68km  
 50 1m 5L 200m 3600sec 1km 72kg 60mm  
 111°C 2 tonne 75W 300 kPa 19m 40L 11

# MYSTICAL MEASURE - YOU'LL NEED A WATCH FOR THIS PAGE!



HOW MANY THUMPS DOES YOUR PULSE MAKE EVERY MINUTE?

	THUMPS PER MINUTE
BEFORE HOPPING	
AFTER HOPPING	

NOW WAIT FOR 2 MINUTES, RELAX, THEN REPEAT THE EXPERIMENT!

	THUMPS PER MINUTE
BEFORE HOPPING	
AFTER HOPPING	

WHAT HAPPENED? \_\_\_\_\_

## HOW LONG CAN I HOLD MY BREATH?

TAKE A DEEP BREATH, HOLD IT, RELEASE, AND RELAX.  
REPEAT AFTER 2 MINUTES.  
REPEAT AFTER 3 MINUTES.



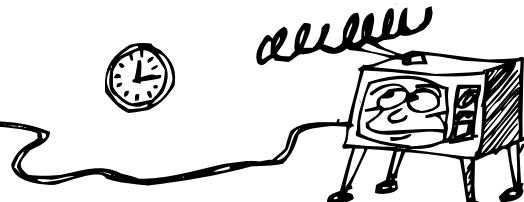
### MY RESULTS

1 BREATH HELD -	seconds.
2 BREATH HELD -	seconds
3 BREATH HELD -	seconds
MY BEST TIME WAS -	seconds

### CLASS RESULTS

FASTEST PULSE RATE -	T.P.M	NAME
SLOWEST PULSE RATE -	T.P.M	NAME
FITTEST PERSON - NAME		
STRONGEST LUNGS - NAME		

# TIMING THE T.V.



24 HOUR CLOCK	TIME	T.V. ONE
1000	10.00	THE MUPPET SHOW
Fill in the missing times →	10.25	ROYAL HERITAGE
1200	11.40	A BIG COUNTRY
_____	12.00	ENGLISH SOCCER
1445	1.00	NEWS REVIEW
_____	1.20	EATING EARTH
1830	2.45	WALT DISNEY
_____	3.45	SUNDAY GRANDSTAND
_____	6.05	COUNTRY CALENDAR
_____	6.30	NETWORK NEWS
_____	6.50	FRONTLINE
_____	7.30	MACGYVER
2030	8.30	MASTERPIECE THEATRE
2130	9.30	NETWORK NEWS
_____	9.45	KOMA
_____	9.50	C.V.
2230	10.30	SUNDAY HORRORS
_____	(CLOSEDOWN AT MIDNIGHT)	

MY FAVOURITE PROGRAMME IS \_\_\_\_\_

AND IT IS ON FOR \_\_\_\_\_ min

HOW LONG IS :

① WALT DISNEY \_\_\_\_\_ min

② A BIG COUNTRY \_\_\_\_\_ min

③ SUNDAY HORRORS \_\_\_\_\_ min

WHICH PROGRAMME IS THE SHORTEST? \_\_\_\_\_

TWO PROGRAMMES ARE ON FOR 25 minutes. THEY ARE

& \_\_\_\_\_

HOW MANY TIMES IS NEWS ON T.V. ONE? \_\_\_\_\_

HOW MUCH TIME IS GIVEN TO THE NEWS? \_\_\_\_\_ min

NOW FILL IN THE MISSING TIMES IN THE CHART BELOW!

24 HOUR TIMES	12 HOUR TIMES	TIME IN WORDS
	8.20 am	TWENTY PAST EIGHT IN THE MORNING
1325		TWENTY-FIVE PAST ONE IN THE AFTERNOON
1100		
	10.15 am	
1630		
	6.05 pm	
2220		TWENTY PAST TEN AT NIGHT
		TEN TO THREE IN THE AFTERNOON

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{lcl} 16 - 5 = \underline{\quad} & 28 \times 3 = \underline{\quad} \\ 13 + 15 = \underline{\quad} & 22 \times 5 = \underline{\quad} \\ 27 - 19 = \underline{\quad} & 19 - 18 = \underline{\quad} \\ 58 + 7 = \underline{\quad} & 66 \div 6 = \underline{\quad} \\ 3 \times 35 = \underline{\quad} & 40 \times 5 = \underline{\quad} \\ 4 \times 23 = \underline{\quad} & 120 - 90 = \underline{\quad} \\ 84 - 6 = \underline{\quad} & 56 + 82 = \underline{\quad} \\ 84 \div 3 = \underline{\quad} & 22 + 88 = \underline{\quad} \\ 36 \div 12 = \underline{\quad} & 90 \div 5 = \underline{\quad} \\ 3 \times 90 = \underline{\quad} & 27 \div 9 = \underline{\quad} \end{array}$$

## TELLING TABLES

$$\begin{array}{lcl} 3 \times 2 = \underline{\quad} \\ 3 \times 4 = \underline{\quad} \\ 3 \times 7 = \underline{\quad} \\ 3 \times 13 = \underline{\quad} \\ 3 \times 10 = \underline{\quad} \\ 3 \times 6 = \underline{\quad} \\ 3 \times 9 = \underline{\quad} \\ 3 \times 12 = \underline{\quad} \\ 3 \times 3 = \underline{\quad} \\ 3 \times 8 = \underline{\quad} \end{array}$$



## EXTRA EXAMPLES

$$\begin{array}{ll} 4 + 8 = 15 - \underline{\quad} & 3 \times \underline{\quad} = 42 \div 7 \\ 12 \times 2 = 18 + \underline{\quad} & 4 + \underline{\quad} = 3 \times 9 \\ 66 \div 6 = 20 - \underline{\quad} & 36 - \underline{\quad} = 3 \times 10 \\ 100 \div 5 = 4 \times \underline{\quad} & 15 \div \underline{\quad} = 3 \times 1 \\ 36 + 2 = 19 \times \underline{\quad} & 6 \times \underline{\quad} = 48 \\ 3 \times 5 = 30 \div \underline{\quad} & 2 \times \underline{\quad} = 100 \\ 5 \times 15 = \underline{\quad} & 42 + 47 = \underline{\quad} \\ 23 - 5 = \underline{\quad} & 31 - 17 = \underline{\quad} \end{array}$$

## MORE MAGIC

2	4	
	8	

TOTAL = 15

2	12	
10		

TOTAL = 30

15	8	
12		

TOTAL = 36

NUMBER OF MISTAKES \_\_\_\_\_

# MEASURING LENGTHS

TODAY WE NEED A RULER AND A PIECE OF STRING  
ALL THE SYMBOLS

FILL IN THE MISSING WORDS  
AND NUMBERS!

mm represents \_\_\_\_\_

cm represents \_\_\_\_\_

mm = 1 centimetre

m represents \_\_\_\_\_

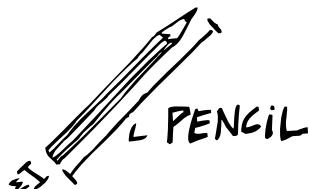
cm = 1 metre

km represents \_\_\_\_\_

m = 1 kilometre

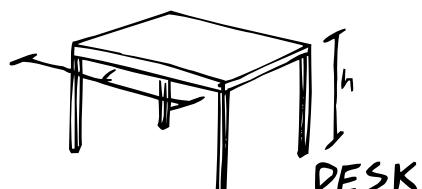
## T

TRY MEASURING THESE OBJECTS AROUND YOU!



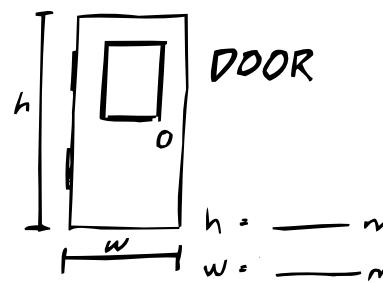
LENGTH L = \_\_\_\_\_ mm

WIDTH w = \_\_\_\_\_ mm



LENGTH L = \_\_\_\_\_ cm

HEIGHT h = \_\_\_\_\_ cm



DOOR

h = \_\_\_\_\_ m  
w = \_\_\_\_\_ m

## H

HOW DO I MEASURE UP?

### = MY PERSONAL MEASUREMENT CHART =

DATE \_\_\_\_\_

MY NECK IS \_\_\_\_\_

TODAY MY HEIGHT IS \_\_\_\_\_

MY WAIST IS \_\_\_\_\_

MY SPAN IS \_\_\_\_\_

MY ARM IS \_\_\_\_\_

MY CHEST IS \_\_\_\_\_

MY FOOT IS \_\_\_\_\_

## S

STRETCH MY IMAGINATION!

LENGTH OF THE SCHOOL FENCE. \_\_\_\_\_

LENGTH OF THE MAIN SCHOOL BUILDING. \_\_\_\_\_

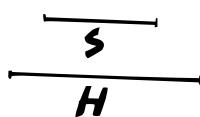
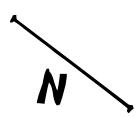
LENGTH OF THE PLAYING FIELD. \_\_\_\_\_

LENGTH OF OUR SCHOOL ROAD. \_\_\_\_\_

LENGTH OF NEW ZEALAND. \_\_\_\_\_

HOW LONG UNTIL I GO HOME?

MEASURE THESE LINES IN  
MILLIMETRES TO FIND OUT!



"

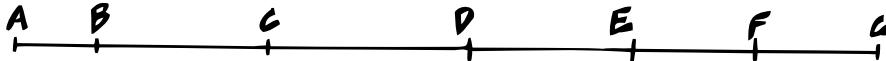
11 25 5 20

30

35 30 20 30 15 25 !"

# HOW DO YOU MEASURE UP? . . . VERY WELL THANK YOU!

MEASURE THE LINE SEGMENTS IN mm. WRITE THE LETTER ABOVE THE CORRECT ANSWER IN THE PUZZLES TO REVEAL THE AUTHORS OF THE BATTY BOOKS! HAVE FUN



$$G = \text{LENGTH OF } \overline{AB} = \underline{\hspace{2cm}} \text{ mm}$$

$$N = \text{LENGTH OF } \overline{CD} = \underline{\hspace{2cm}} \text{ mm}$$

$$U = \text{LENGTH OF } \overline{BD} = \underline{\hspace{2cm}} \text{ mm}$$

$$A = \text{LENGTH OF } \overline{CE} = \underline{\hspace{2cm}} \text{ mm}$$

$$S = \text{LENGTH OF } \overline{EF} = \underline{\hspace{2cm}} \text{ mm}$$

$$M = \text{LENGTH OF } \overline{CG} = \underline{\hspace{2cm}} \text{ mm}$$

$$Y = \text{LENGTH OF } \overline{DF} = \underline{\hspace{2cm}} \text{ mm}$$

$$F = \text{LENGTH OF } \overline{AD} = \underline{\hspace{2cm}} \text{ mm}$$

$$E = \text{LENGTH OF } \overline{DE} = \underline{\hspace{2cm}} \text{ mm}$$

$$L = \text{LENGTH OF } \overline{BE} = \underline{\hspace{2cm}} \text{ mm}$$

$$R = \text{LENGTH OF } \overline{CF} = \underline{\hspace{2cm}} \text{ mm}$$

$$O = \text{LENGTH OF } \overline{BG} = \underline{\hspace{2cm}} \text{ mm}$$

$$P = \text{LENGTH OF } \overline{AG} = \underline{\hspace{2cm}} \text{ mm}$$

$$D = \text{LENGTH OF } \overline{BF} = \underline{\hspace{2cm}} \text{ mm}$$

$$I = \text{LENGTH OF } \overline{DG} = \underline{\hspace{2cm}} \text{ mm}$$

## BATTY BOOK TITLES

### APOLOGIZING MADE EASY

BY

16 47 37 21 63    16 100 63 63 37

### RICE CROPS OF THE WORLD

BY

110 47 85 85 37    59 52 21 69 85 16

### ARITHMETIC

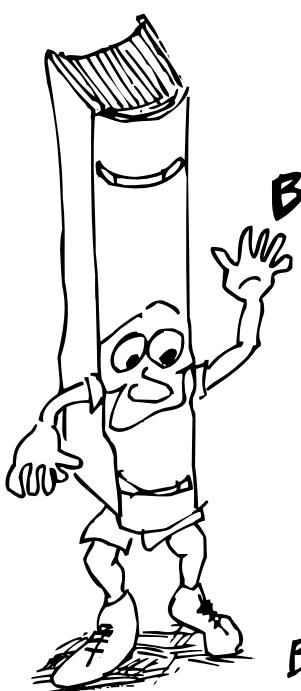
BY

47 85 47 78    48 110 110 21

### ONE, TWO, THREE, WALTZ

BY

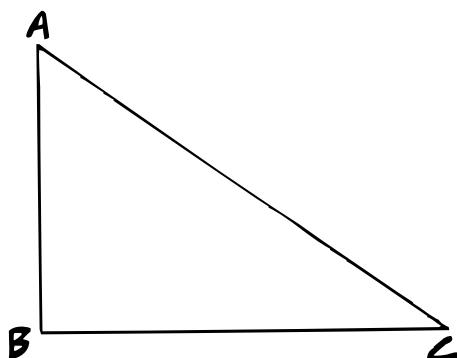
52 78 85 47 26    16 52 26 10



# MEET MR. PERRY MITA!



THE DISTANCE AROUND A SHAPE IS CALLED ITS \_\_\_\_\_  
MEASURE THE SIDES AND FIND THE PERIMETER OF EACH SHAPE.

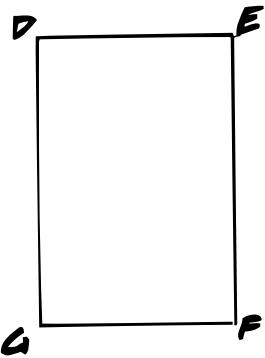


$$AB = \underline{\hspace{2cm}} \text{ mm}$$

$$BC = \underline{\hspace{2cm}} \text{ mm}$$

$$CA = \underline{\hspace{2cm}} \text{ mm}$$

$$\text{PERIMETER} = \underline{\hspace{2cm}} \text{ mm}$$



$$DE = \underline{\hspace{2cm}} \text{ mm}$$

$$EF = \underline{\hspace{2cm}} \text{ mm}$$

$$FG = \underline{\hspace{2cm}} \text{ mm}$$

$$GD = \underline{\hspace{2cm}} \text{ mm}$$

$$\text{PERIMETER} = \underline{\hspace{2cm}} \text{ mm}$$

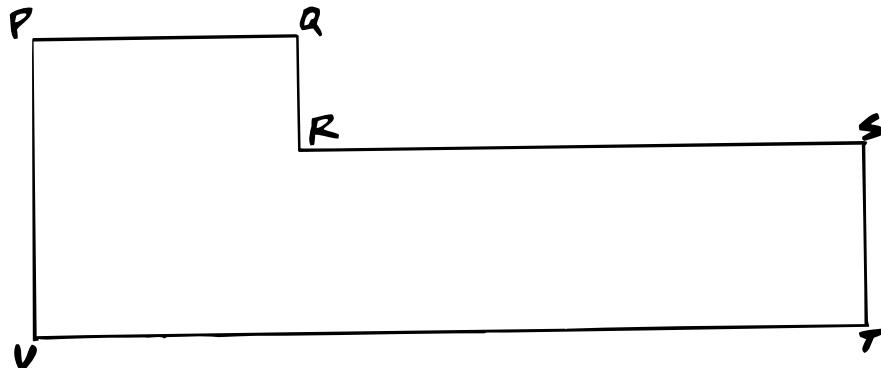
$$HI = \underline{\hspace{2cm}} \text{ mm}$$

$$IJ = \underline{\hspace{2cm}} \text{ mm}$$

$$JK = \underline{\hspace{2cm}} \text{ mm}$$

$$KH = \underline{\hspace{2cm}} \text{ mm}$$

$$\text{PERIMETER} = \underline{\hspace{2cm}} \text{ mm}$$



$$PQ = \underline{\hspace{2cm}} \text{ mm}$$

$$QR = \underline{\hspace{2cm}} \text{ mm}$$

$$RS = \underline{\hspace{2cm}} \text{ mm}$$

$$ST = \underline{\hspace{2cm}} \text{ mm}$$

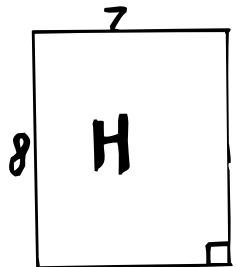
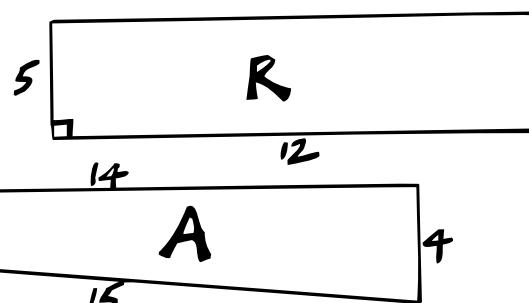
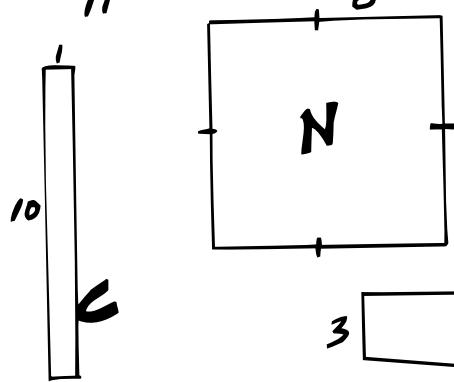
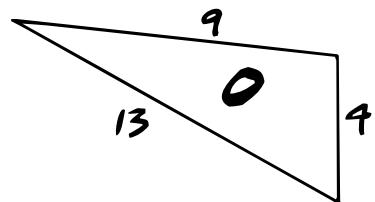
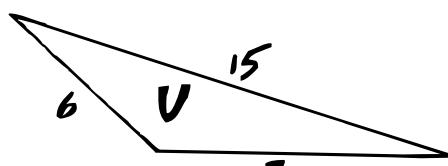
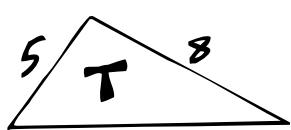
$$TU = \underline{\hspace{2cm}} \text{ mm}$$

$$UP = \underline{\hspace{2cm}} \text{ mm}$$

$$\text{PERIMETER} = \underline{\hspace{2cm}} \text{ mm}$$

WHAT DO WE GET WHEN WE MIX A PEPPER AND A GRAPE?  
CALCULATE THESE PERIMETERS TO FIND THE ANSWER!  
“ ”

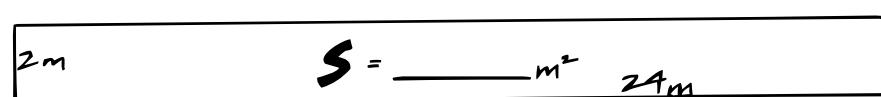
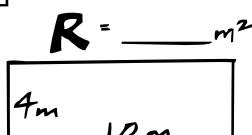
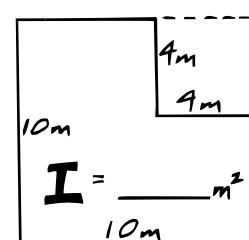
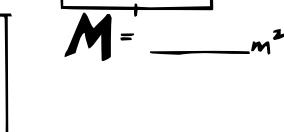
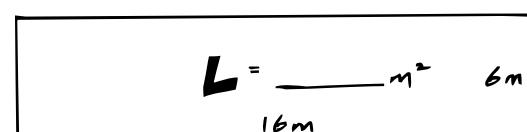
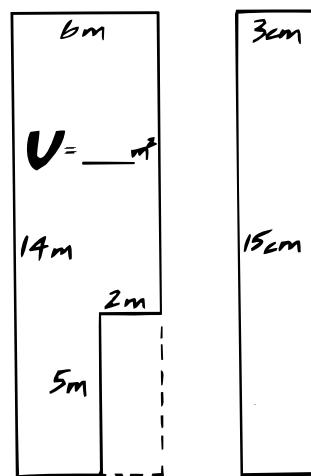
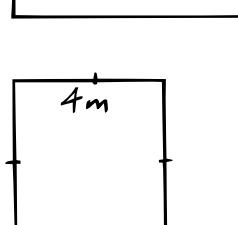
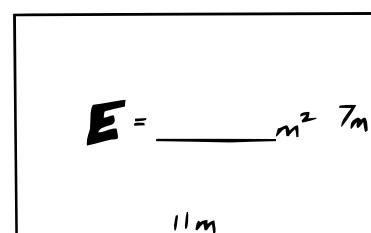
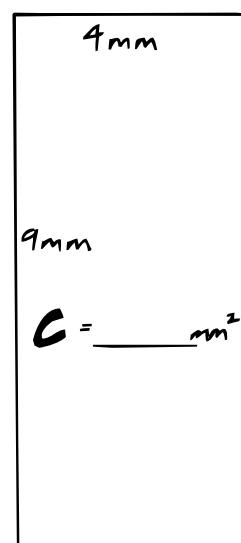
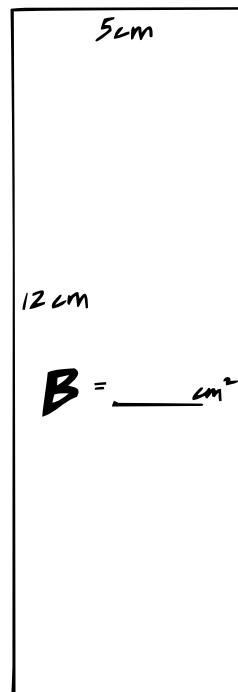
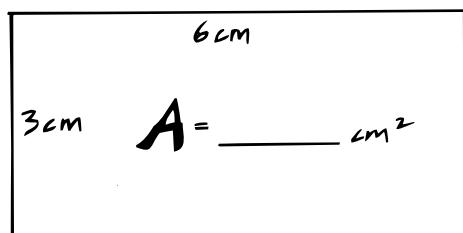
36    30    26    24    22    28    34    34    36    32    24



THE FORMULA FOR THE AREA OF A RECTANGLE IS:

CALCULATE THE AREAS OF THE RECTANGLES BELOW TO DECODE THE ANSWER TO THE CHILLING QUESTION!

# WHICH FIRM SUPPLIED FREEZERS TO THE JAIL?



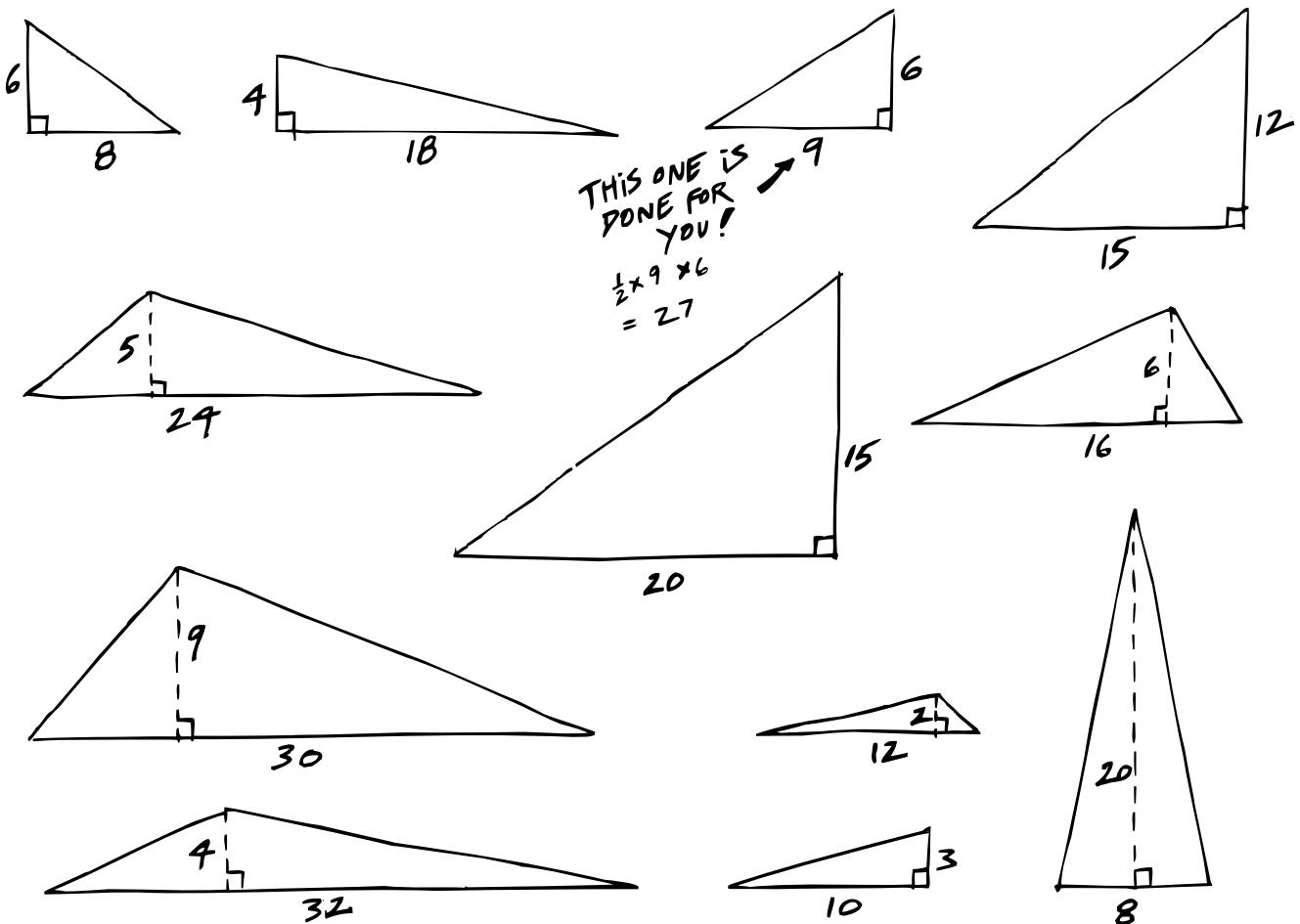
"  
— 84 — 36 — 74 — 60 — 74 — 40 — 30 — 96 — 18 — 40 — 48 — 96 — 84 — 16 — 84 — 45 — 77 — 64

# A HISTORICAL MYTH!

THE FORMULA FOR THE AREA OF A TRIANGLE IS...

CALCULATE THE AREAS FOR THESE TRIANGLES AND FIND YOUR ANSWER IN THE RECTANGLE BELOW. (THE CORRECT ANSWERS GO ACROSS FROM LEFT TO RIGHT.)

COLOUR IN EACH CORRECT ANSWER. THE 24 LETTERS LEFT TELL THE MYTH!



P 5	I 3	E 6	Y 9	O 2	V 4	T 7	H 3	E 1	N 5	D 0	A 7
G 2	0 9	A 1	X 3	E 5	R 0	B 4	L 8	A 1	S 6	T 1	Y 5
L 8	0 5	6 3	7 7	V 1	E 4	D 3	O 8	N 0	T 2	R 2	Y 9
P 0	I 6	A 5	N 4	S 6	U 4	G 7	L 2	E 1	G 6	A 0	S 3

"

"

# WHIZZ-KIDS WORKSHEET



## NIFTY NUMBERS

$$\begin{array}{ll} 4+13 = \underline{\quad} & 5 \times 6 = \underline{\quad} \\ 20+90 = \underline{\quad} & 90 \times 3 = \underline{\quad} \\ 35-7 = \underline{\quad} & 15 \div 1 = \underline{\quad} \\ 87-22 = \underline{\quad} & 900 \div 30 = \underline{\quad} \\ 105-10 = \underline{\quad} & 8 \times 6 = \underline{\quad} \\ 3 \times 26 = \underline{\quad} & 15 \times 9 = \underline{\quad} \\ 4 \div 1 = \underline{\quad} & 27 \times 3 = \underline{\quad} \\ 258 \div 3 = \underline{\quad} & 45 + 57 = \underline{\quad} \\ 85+10 = \underline{\quad} & 27 + 27 = \underline{\quad} \\ 400 \div 20 = \underline{\quad} & 104 \div 2 = \underline{\quad} \end{array}$$

## EASY EXPRESSIONS

$$\begin{array}{l} 5c + 4c = \underline{\quad} \\ 2a + 6a = \underline{\quad} \\ 9k + 4k + 2k = \underline{\quad} \\ 4m + 2m = \underline{\quad} \\ 9p - 5p = \underline{\quad} \\ 4x + 2x - 6x = \underline{\quad} \\ 3a + 4a = \underline{\quad} \\ 6c - 2c = \underline{\quad} \\ 9l - 3l = \underline{\quad} \\ 20f + 5f = \underline{\quad} \end{array}$$

## MORE MAGIC

- FILL IN THE SQUARES SO ALL ROWS, COLUMNS & DIAGONALS ADD UP TO THE TOTAL!

4		6
	10	

TOTAL = 21

5		
	8	

TOTAL = 24

16	10	

TOTAL = 30

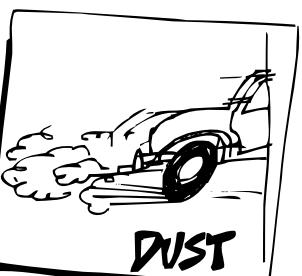
## DAY AT THE FAIR



PERSON	HAD	BOUGHT	SPENT	HAD LEFT
RODNEY	\$ 5	2 HOT DOGS		
EPI	\$ 2	1 DRINK & 1 DOUGHNUT		
DIANNE	\$ 3.50	2 LOLLY POPS & 1 CAKE		
MAXWELL	\$ 10	1 DRINK & 1 CAKE		
CLAUDIA	\$ 20	3 OF EVERYTHING!!		

NUMBER OF MISTAKES \_\_\_\_\_

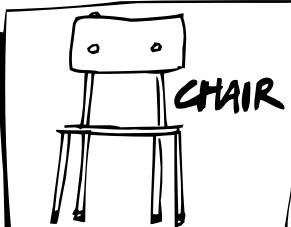
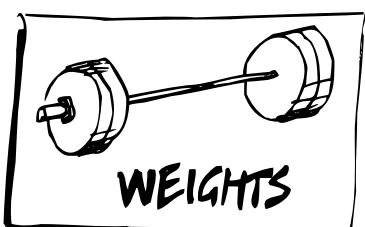
# LET'S EXPLORE MASS! TODAY YOU'LL NEED SCALES TO 'WEIGH IN!' MANY THINGS ARE QUITE LIGHT!



SMALL MASSES ARE MEASURED IN G-----

WHAT I WEIGHED	ESTIMATED MASS (GUESS)	ACTUAL MASS (MEASURED)	HOW CLOSE WAS MY ESTIMATE?
A PEN			
THE DUSTER			
MY LUNCH BOX			
CARDBOARD			
MY SHOE			

OTHER OBJECTS ARE JUST RIGHT!



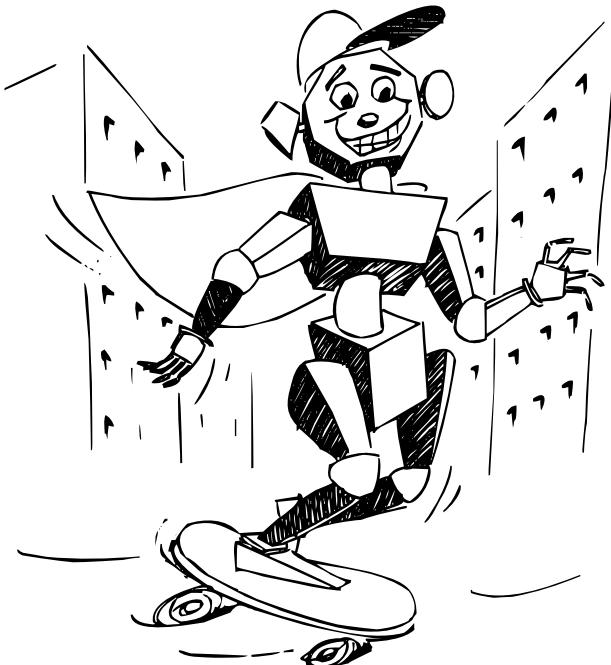
BIG MASSES ARE MEASURED USING K-----

WHAT I WEIGHED	ESTIMATED MASS (GUESS)	ACTUAL MASS (MEASURED)	HOW CLOSE WAS MY ESTIMATE?
MY MATHS BOOK			
MY SCHOOL BAG			
MYSELF			
MY TEACHER			

"WHY DO FISH NEVER KNOW THEIR WEIGHT?

BECAUSE THEY ALWAYS LOSE THEIR SCALES!"





# MATHEMATICS IN MOTION!

SPEED IS \_\_\_\_\_

- THE FORMULA WE USE TO CALCULATE SPEED IS :

$$\text{SPEED} = \frac{\text{DISTANCE TRAVELED}}{\text{TIME TAKEN}}$$

VEHICLE	DISTANCE TRAVELED	TIME TAKEN	SPEED
BMX CYCLE	10 metres	10 seconds	m/s
SKATE BOARD	20 metres	10 seconds	m/s
HONDA 500	80 metres	10 seconds	m/s
TOYOTA CAR	110 metres	10 seconds	m/s
BLUEBIRD BOAT	200 metres	5 seconds	m/s
767 JET	300 metres	5 seconds	m/s
MY FEET			
TEACHERS CAR			

- MAKE SOME MEASUREMENTS YOURSELF

1.		
2.		
3.		

- SOLVE THE RATIO PROBLEMS TO IDENTIFY THE STRONG MATHEMATICIAN WHO SAVED THE BRIDGE!

$$T \quad 1:2 = \underline{\quad}:8 \quad O \quad 3:1 = \underline{\quad}:5 \quad M \quad 1:7 = 3:\underline{\quad}$$

$$V \quad 4:1 = 12:\underline{\quad} \quad H \quad 1:8 = 2:\underline{\quad} \quad A \quad 10:1 = \underline{\quad}:6$$

$$E \quad 1:9 = \underline{\quad}:45 \quad I \quad 6:1 = \underline{\quad}:4 \quad S \quad 4:3 = \underline{\quad}:9$$

$$R \quad 1:5 = 2:\underline{\quad} \quad F \quad \underline{\quad}:30 = 100:100$$

# "FILL-'ER-UP-MATE!"

TODAY WE'RE GOING TO MEASURE  
— USE A ONE LITRE MEASURING JUG TO FIND THE QUANTITY OF WATER EACH CONTAINER CAN HOLD.

WHAT I MEASURED	ESTIMATE	ACTUAL MEASURE
BOWL	l	l
POT	l	l
DRINK BOTTLE	l	l
BUCKET	l	l
CUP	ml	ml

NOW SOME OF MY CHOICE!

1		
2		
3		
4		
5		

DON'T FORGET THE UNITS!

NOW WRITE 6 LIQUID PRODUCTS YOU HAVE IN YOUR HOME.

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$16 + 18 = \underline{\hspace{2cm}}$   
 $19 - 11 = \underline{\hspace{2cm}}$   
 $12 \times 12 = \underline{\hspace{2cm}}$   
 $18 \div 6 = \underline{\hspace{2cm}}$   
 $17 + 17 = \underline{\hspace{2cm}}$   
 $15 - 9 = \underline{\hspace{2cm}}$   
 $11 \times 10 = \underline{\hspace{2cm}}$   
 $20 \div 4 = \underline{\hspace{2cm}}$   
 $18 + 15 = \underline{\hspace{2cm}}$   
 $19 + 19 = \underline{\hspace{2cm}}$

## DANDY DECIMALS

$1.4 + 1.3 = \underline{\hspace{2cm}}$   
 $1.6 + 1.2 = \underline{\hspace{2cm}}$   
 $2.4 - 1.3 = \underline{\hspace{2cm}}$   
 $2.6 - 2.6 = \underline{\hspace{2cm}}$   
 $1 - 0.5 = \underline{\hspace{2cm}}$   
 $3 - 0.9 = \underline{\hspace{2cm}}$   
 $7 \times 0.4 = \underline{\hspace{2cm}}$   
 $6 \times 0.8 = \underline{\hspace{2cm}}$   
 $25\% \text{ AS A DECIMAL IS } \underline{\hspace{2cm}}$   
 $40\% \text{ AS A DECIMAL IS } \underline{\hspace{2cm}}$

## RADICAL ROMANS

VIII =  $\underline{\hspace{2cm}}$   
 XII =  $\underline{\hspace{2cm}}$   
 XIV =  $\underline{\hspace{2cm}}$   
 XVIII =  $\underline{\hspace{2cm}}$   
 XXII =  $\underline{\hspace{2cm}}$   
 $\underline{\hspace{2cm}} = 7$   
 $\underline{\hspace{2cm}} = 11$   
 $\underline{\hspace{2cm}} = 16$   
 $\underline{\hspace{2cm}} = 19$   
 $\underline{\hspace{2cm}} = 24$



## EXTRA EXAMPLES

$624 + 300 = \underline{\hspace{2cm}}$   
 $500 + 500 = \underline{\hspace{2cm}}$   
 $400 - 150 = \underline{\hspace{2cm}}$   
 $500 - 194 = \underline{\hspace{2cm}}$   
 $80 \times 5 = \underline{\hspace{2cm}}$   
 $76 \times 10 = \underline{\hspace{2cm}}$   
 $90 \div 9 = \underline{\hspace{2cm}}$   
 $1800 \div 10 = \underline{\hspace{2cm}}$   
 $222 + 555 = \underline{\hspace{2cm}}$   
 $734 - 437 = \underline{\hspace{2cm}}$

## THE QUINTUS QUIZ

I LEFT HOME AT  $\underline{\hspace{2cm}}$   
 IT TOOK  $\underline{\hspace{2cm}}$  MINUTES TO  
 GET TO SCHOOL. SCHOOL WENT  
 FOR  $\underline{\hspace{2cm}}$  HOURS. SUPPER  
 WAS AT  $\underline{\hspace{2cm}}$  TODAY. I WAS  
 OUT OF BED FOR  $\underline{\hspace{2cm}}$  HOURS.

-WEDNESDAY-
OUT OF BED 6.30 a.m.
LEFT HOME 8.10
GOT TO SCHOOL 9.00
SCHOOL FINISHED 3.30
ARRIVED HOME 4.00
SUPPERTIME 9.30
INTO MY BED 10.00

NUMBER OF MISTAKES  $\underline{\hspace{2cm}}$

# - M.C. ADDITION'S MATHS RAP! -

WORDS CAN BE NUMBERS, THAT'S WHAT I'VE HEARD,  
SO WRITE THE NUMBER BESIDE THESE WORDS!



EIGHTY SIX \_\_\_\_\_

THREE HUNDRED AND FIFTY TWO \_\_\_\_\_

SEVEN THOUSAND NINE HUNDRED AND FOURTEEN \_\_\_\_\_

ONE MILLION \_\_\_\_\_

FOUR POINT FIVE \_\_\_\_\_

TWO HUNDRED AND SEVEN \_\_\_\_\_

FIVE HUNDRED AND NINE \_\_\_\_\_

SIX THOUSAND, TWO HUNDRED \_\_\_\_\_

NINE THOUSAND AND SIXTY ONE \_\_\_\_\_

EIGHT THOUSAND AND FORTY \_\_\_\_\_

TEN THOUSAND AND TEN \_\_\_\_\_

THREE MILLION TWO HUNDRED AND TEN THOUSAND \_\_\_\_\_

## A SUPER CHINESE MEAL

32 48 84 5 32 48 48 84 32 34 44 32 48 5 82 48 46 30 60 84 75 46 84

A
E
F
L
N
O
P
S
T
U
W

TWENTY TWO ADDED TO FIFTY THREE \_\_\_\_\_

SIX TIMES FOURTEEN \_\_\_\_\_

THE SUM OF SEVEN, EIGHT AND NINETEEN \_\_\_\_\_

THE PRODUCT OF FIVE AND TWELVE \_\_\_\_\_

THE PRODUCT OF TWO, FOUR AND SIX \_\_\_\_\_

THE DIFFERENCE BETWEEN SEVENTY AND THIRTY EIGHT \_\_\_\_\_

ONE HUNDRED AND FIFTY DIVIDED BY FIVE \_\_\_\_\_

THE SUM OF THIRTEEN, THIRTY AND THREE \_\_\_\_\_

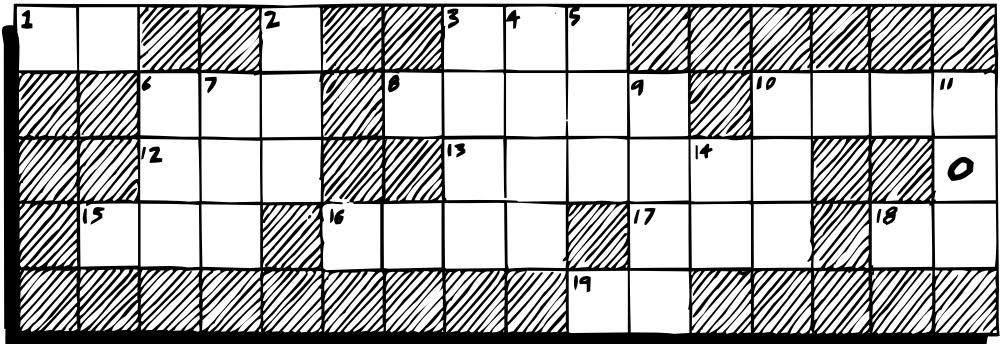
THE DIFFERENCE BETWEEN FIFTY ONE AND FORTYSIX \_\_\_\_\_

TWO MORE THAN FOUR TIMES TWENTY \_\_\_\_\_

ONE LESS THAN NINE TIMES FIVE \_\_\_\_\_

# CROSS NUMBER

- FILL IN THE  
NUMBERS GIVEN THE CLUES ACROSS!

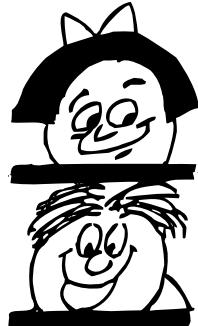


## ACROSS - WRITE IN NUMBER

- 1 NINETY FOUR
- 2 THREE
- 3 EIGHT HUNDRED AND FORTY SEVEN
- 6 TWO HUNDRED AND SIXTY
- 8 TWENTY NINE THOUSAND AND THIRTY SEVEN
- 10 NINE THOUSAND NINE HUNDRED AND NINETY NINE
- 12 THREE HUNDRED AND FORTY TWO
- 13 FOUR HUNDRED AND SEVENTY THOUSAND, NINE HUNDRED AND TWENTY ONE
- 15 SIX HUNDRED AND FIFTEEN
- 16 FIVE THOUSAND AND NINE
- 17 TWO HUNDRED AND TWO
- 18 FIFTY EIGHT
- 19 NINETY NINE

## DOWN - WRITE USING WORDS

- 2
- 3
- 4
- 5
- 6
- 7
- 9
- 10
- 11
- 14



...WHAT DID MARG  
SAY TO PEPPA?



BY COMPLETING THE TABLES BELOW AND THEN  
DOING THE SUMS, YOU'LL FIND OUT!

NUMBER	1	2	5	6	8	9	12	13	15	16	20	25
SQUARE												

NUMBER	4	9	16	49	100	121	196	1000000
SQUARE ROOT								

A  $3^2 + 5 = \underline{\hspace{2cm}}$

I  $\sqrt{36} + 10 = \underline{\hspace{2cm}}$

C  $2 + 4^2 = \underline{\hspace{2cm}}$

L  $6 + \sqrt{81} = \underline{\hspace{2cm}}$

D  $7^2 - 29 = \underline{\hspace{2cm}}$

N  $\sqrt{144} - 1 = \underline{\hspace{2cm}}$

E  $124 - 10^2 = \underline{\hspace{2cm}}$

O  $17 - \sqrt{25} = \underline{\hspace{2cm}}$

F  $11^2 - 95 = \underline{\hspace{2cm}}$

R  $\sqrt{400} - \sqrt{9} = \underline{\hspace{2cm}}$

G  $2^2 + 3^2 = \underline{\hspace{2cm}}$

S  $\sqrt{144} + 3^2 = \underline{\hspace{2cm}}$

Y  $5^2 - 6 = \underline{\hspace{2cm}}$

M  $\sqrt{49} + \sqrt{9} = \underline{\hspace{2cm}}$

"

$\overline{15}$   $\overline{16}$   $\overline{26}$   $\overline{24}$     $\overline{16}$   $\overline{11}$     $\overline{10}$   $\overline{19}$     $\overline{26}$   $\overline{17}$   $\overline{16}$   $\overline{20}$   $\overline{13}$   $\overline{24}$     $\overline{16}$   $\overline{21}$

$\overline{17}$   $\overline{24}$   $\overline{14}$   $\overline{15}$     $\overline{18}$   $\overline{12}$   $\overline{12}$   $\overline{15}$  !"

# WHIZZ-KIDS WORKSHEET

**15**



## NIFTY NUMBERS

$$\begin{array}{rcl} 11 + 14 = & \underline{\hspace{2cm}} \\ 14 - 11 = & \underline{\hspace{2cm}} \\ 12 \times 5 = & \underline{\hspace{2cm}} \\ 16 \div 4 = & \underline{\hspace{2cm}} \\ 13 + 16 = & \underline{\hspace{2cm}} \\ 18 - 12 = & \underline{\hspace{2cm}} \\ 11 \times 10 = & \underline{\hspace{2cm}} \\ 15 \div 5 = & \underline{\hspace{2cm}} \\ 19 + 18 = & \underline{\hspace{2cm}} \\ 17 + 15 = & \underline{\hspace{2cm}} \end{array}$$

## MONEY MIXTURES

$$\begin{array}{rcl} 15_c + 15_c = & \underline{\hspace{2cm}} \\ 10_c - 6_c = & \underline{\hspace{2cm}} \\ 3 \times 10_c = & \underline{\hspace{2cm}} \\ 7 \times 20_c = & \underline{\hspace{2cm}} \\ 50_c + 20_c = & \underline{\hspace{2cm}} \\ 50_c - 20_c = & \underline{\hspace{2cm}} \\ \$4 + \$6 = & \underline{\hspace{2cm}} \\ \$9 - \$5 = & \underline{\hspace{2cm}} \\ \$20 \times 3 = & \underline{\hspace{2cm}} \\ \$80 \div 4 = & \underline{\hspace{2cm}} \end{array}$$

## VISCOUS VARIABLES

$$\begin{array}{rcl} a + a = & \underline{\hspace{2cm}} \\ 2b + b = & \underline{\hspace{2cm}} \\ c + 2c = & \underline{\hspace{2cm}} \\ 3d + 3d = & \underline{\hspace{2cm}} \\ 3e + 2e = & \underline{\hspace{2cm}} \\ f - f = & \underline{\hspace{2cm}} \\ 3g - g = & \underline{\hspace{2cm}} \\ 5h - 2h = & \underline{\hspace{2cm}} \\ 5i - 4i = & \underline{\hspace{2cm}} \\ 2j + 2j + 2j = & \underline{\hspace{2cm}} \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{rcl} 123 + 100 = & \underline{\hspace{2cm}} \\ 300 + 200 = & \underline{\hspace{2cm}} \\ 100 - 75 = & \underline{\hspace{2cm}} \\ 200 - 50 = & \underline{\hspace{2cm}} \\ 40 \times 6 = & \underline{\hspace{2cm}} \\ 70 \times 8 = & \underline{\hspace{2cm}} \\ 40 \div 5 = & \underline{\hspace{2cm}} \\ 80 \div 4 = & \underline{\hspace{2cm}} \\ 333 + 333 = & \underline{\hspace{2cm}} \\ 625 - 125 = & \underline{\hspace{2cm}} \end{array}$$

## THE QUINTUS QUIZ

- HOW MANY DAYS IN JULY \_\_\_\_\_
- WHAT DAY IS JUNE 3rd \_\_\_\_\_
- WHAT DATE IS THE FOURTH TUESDAY OF JULY \_\_\_\_\_
- WHAT DATE IS THE SECOND FRIDAY OF JUNE \_\_\_\_\_
- HOW MANY MONDAYS IN JULY \_\_\_\_\_

JUNE						
M	T	W	T	F	S	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

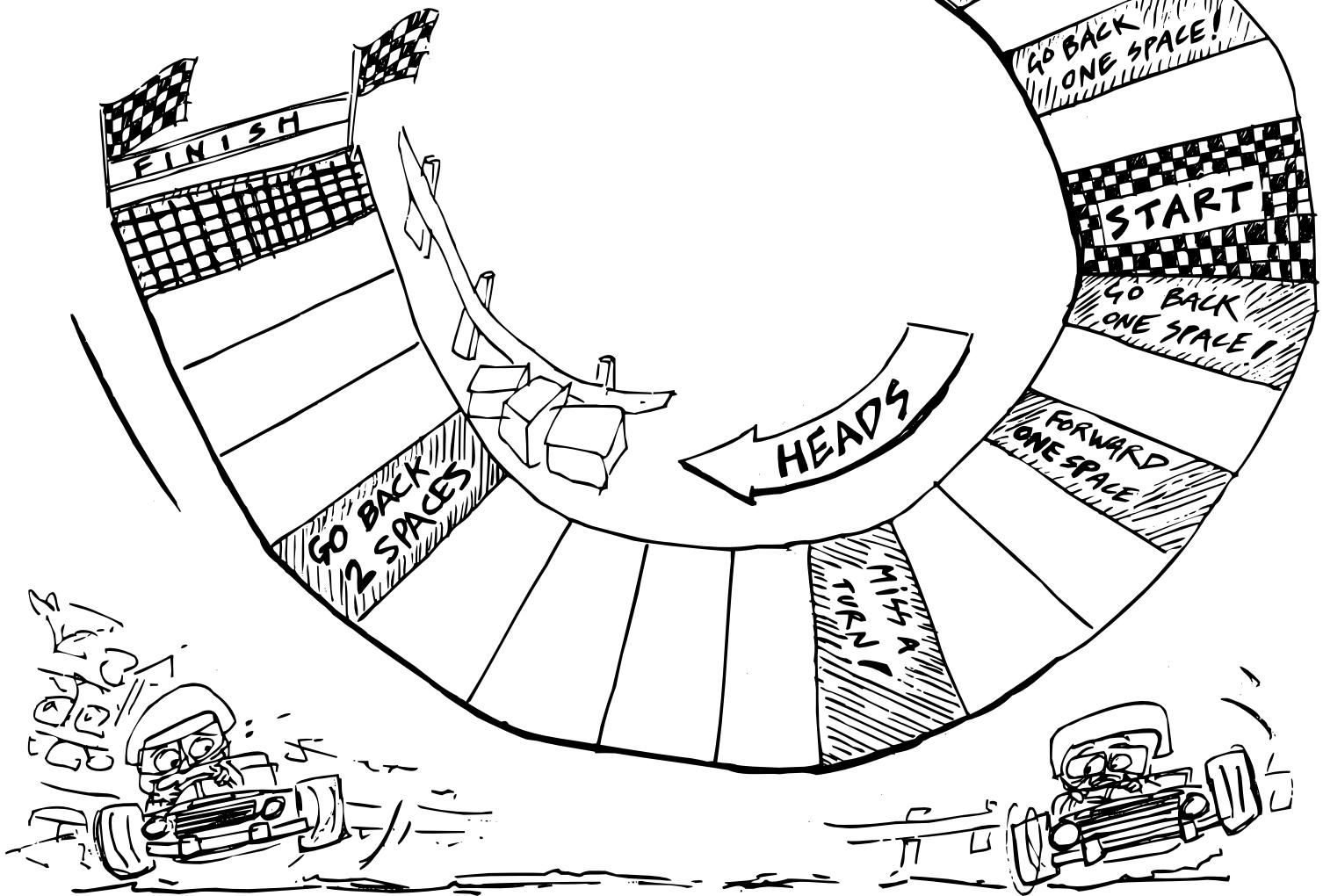
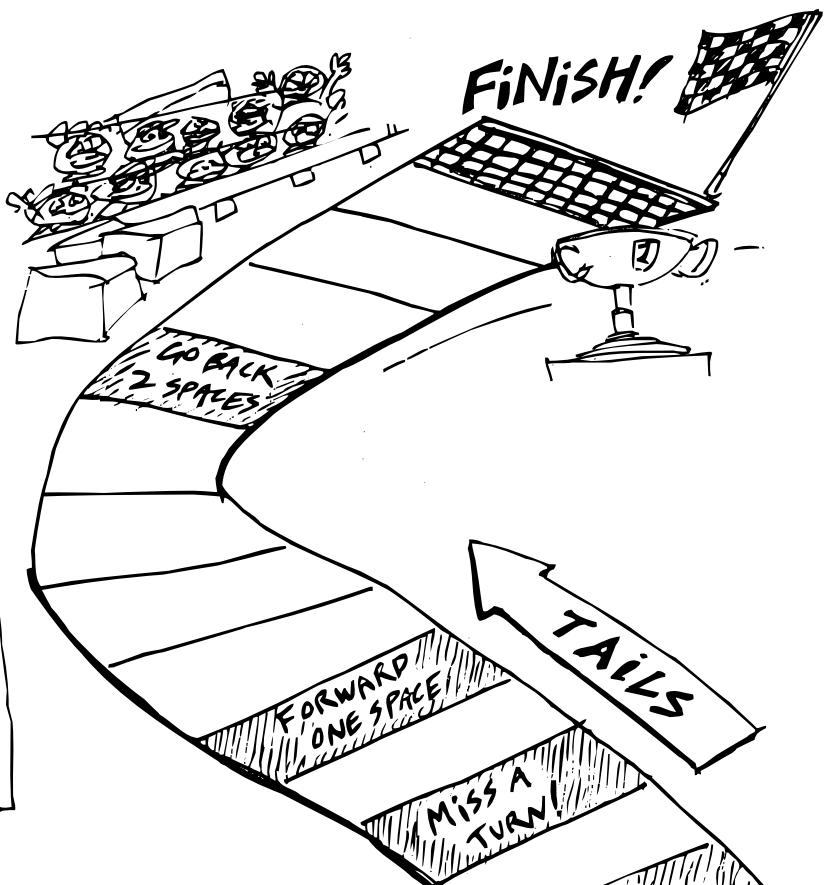
JULY						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NUMBER OF MISTAKES \_\_\_\_\_

# THE GREAT INTEGERNAPOLIIS 500!

## INSTRUCTIONS

- GET A DIE, A COIN, AND COUNTERS FOR EACH PLAYER.
- FLIP THE COIN AND Toss THE DICE EVERY TIME
- THE COIN GIVES THE DIRECTION
- THE DICE GIVES THE AMOUNT TO MOVE.
- A PLAYER WINS BY CROSSING EITHER FINISH LINE FIRST. EXACT NUMBER NOT NEEDED.  
*(ALTERNATIVELY, Toss THE COIN ONLY ONCE AND CONTINUE IN THAT DIRECTION.)*



# -UP AND DOWN-

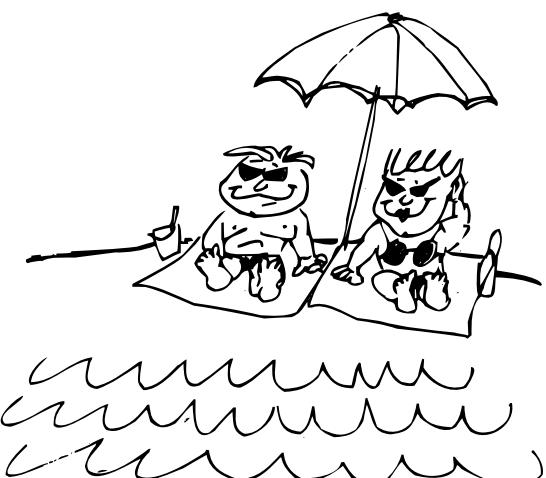
HOW MANY FLOORS DID THE LIFT TRAVEL AND WHICH WAY WAS IT GOING?

e.g.

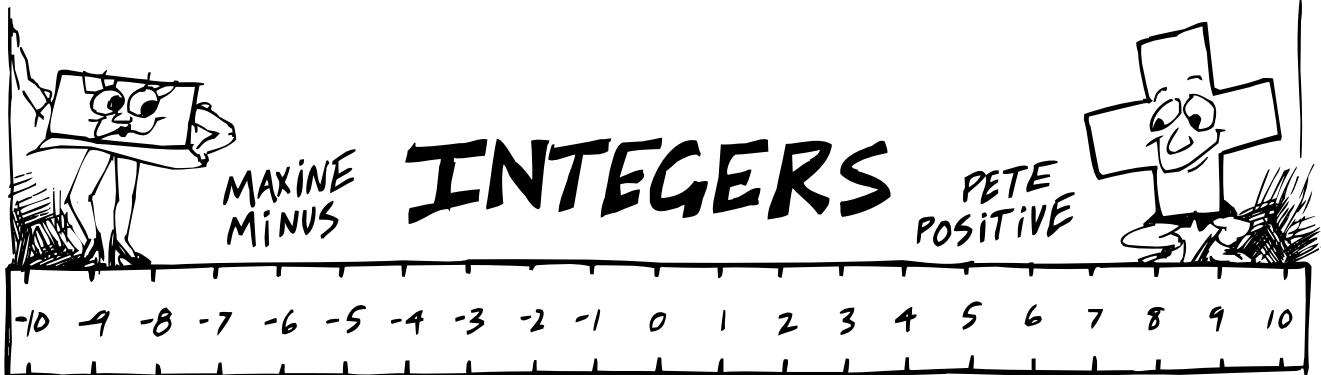
FROM THIS FLOOR	TO THIS FLOOR	HOW MANY? WHICH WAY?
0	1	1 UP
1	5	
5	8	
8	4	
4	3	
3	0	
0	2	
2	10	
10	6	
6	5	
5	0	



HERE IS MT. COOK'S DAILY TEMPERATURE ( $^{\circ}\text{C}$ ) LOG SHEET. FILL IN THE GAPS!



START OF THE DAY	CHANGE IN TEMPERATURE	MIDDAY RECORDING
4°	RISE 6°	
3°	FALL 5°	
5°	RISE 2°	
1°	FALL 7°	
2°		10°
4°		0°
6°		-1°
-3°		5°
	RISE 10°	0°
	FALL 3°	-7°
	RISE 4°	1°
-2	FALL 1°	



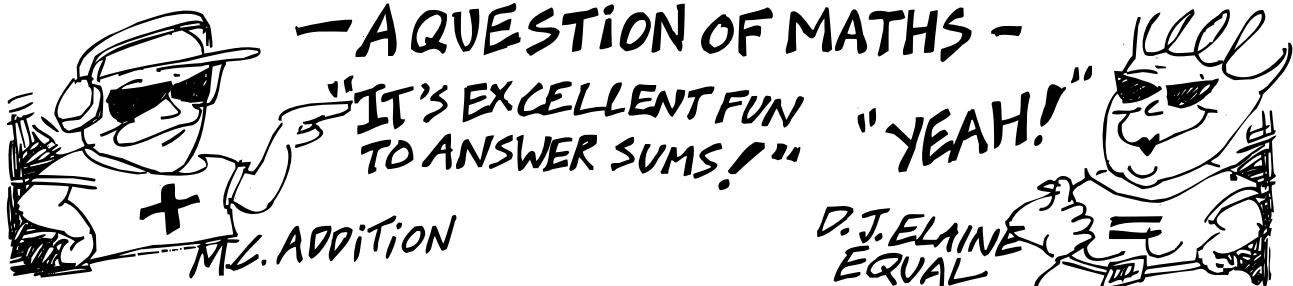
# INTEGERS

$-8 + 2 =$	$-5 + 9 =$	$-7 + 3 =$	$2 - 5 =$
$6 + 8 =$	$-7 - 3 =$	$13 + 4 =$	$-7 + 9 =$
$5 - 9 =$	$8 - 8 =$	$-7 - 8 =$	$8 - 5 =$
$-9 + 1 =$	$-1 - 6 =$	$4 - 8 =$	$-1 - 2 =$
$-3 - 1 =$	$-20 + 7 =$	$-6 + 9 =$	$-8 + 9 =$
$-1 + 5 =$	$-9 - 9 =$	$-10 + 3 =$	$-6 - 9 =$
$-3 + 6 =$	$-7 + 1 =$	$6 - 7 =$	$7 - 9 =$
$9 - 2 =$	$2 - 9 =$	$-9 + 6 =$	$-5 + 3 =$
$-3 + 3 =$	$-9 - 4 =$	$-3 + 5 =$	$-8 - 9 =$

**"HOW MANY PEAS IN A PIE?"**  
**— SHADE IN ALL THE MISTAKES TO FIND OUT!**

+	-4	-7	2	5	-6	4	1	-3	-5	6	-1	7
1	-3	-6	3	6	-5	5	2	-2	-6	4	0	8
-3	7	-4	5	2	-9	1	-2	-6	2	3	-4	4
-5	9	-12	7	0	-11	-1	-4	-8	0	11	-6	2
6	10	-1	4	11	0	10	7	3	11	12	5	13
-1	3	-5	3	4	-7	3	0	-4	-4	7	-2	6
7	3	0	9	12	-2	10	12	4	2	13	6	14
-4	-8	-11	-2	1	10	0	5	-7	-9	2	-5	3
-7	-11	-14	-5	-2	12	-3	8	-10	-12	-1	8	10
2	-2	-5	4	7	8	6	2	-1	-3	8	11	8
5	1	-2	7	10	10	9	8	2	0	11	-4	-2

**THIS PUZZLE MIGHT NEED A CALCULATOR!**



$-16 + 17 =$	$-9 + 37 =$	$52 - 83 =$	$-96 + 16 =$
$-113 - 56 =$	$-34 - 7 + 11 =$	$50 - 18 - 23 =$	$-8 - 12 + 83 =$
$40 - 19 - 12 =$	$44 - 53 + 60 =$	$-75 - 57 =$	$13 - 12 =$
$28 - 3 =$	$-6 - 7 =$	$-11 + 11 =$	$-11 - 11 =$
$-9 - 10 =$	$-34 + 18 =$	$-31 - 7 =$	$6 - 13 =$
$-22 - 25 =$	$23 - 47 =$	$-50 - 72 =$	$-17 - 26 =$
$-14 - 21 =$	$26 - 12 =$	$-14 - 21 =$	$30 + 41 =$

## -MATHS QUESTIONS YOU WERE ALWAYS AFRAID TO ASK!

SOLVE THE SUMS & WRITE THE LETTER ABOVE THE ANSWERS IN THE CODE.

WHAT HAPPENED TO THE PLANT IN THE MATHS ROOM?

— — — — —  
-7 -23 -13 -15 + -8 5 29 -9 1 -15 + -15 22 22 -23 5

WHY WASN'T DORIS IN THE MATHS CLASS?

— — — — —  
5 -4 + -8 1 5 5 -9 -6 -8 + 4 -15 + 4 10 5 +

WHEN DOES  $5+5=12$ ?

— — — — —  
-8 -4 4 -24 9 22 -9 -15 -4 22 -6 + -8 22 -15 -2

— — — — —  
-7 5 -8 -15 22 -24 -13

L $30 - 20 =$	K $-7 + 5 =$	M $-6 - 0 =$	Y $5 + 4 =$
N $-6 - 18 =$	H $-15 + 11 =$	O $-3 + 25 =$	A $-3 + 4 =$
U $10 - 19 =$	Q $10 + 19 =$	S $17 - 12 =$	W $-5 - 3 =$
E $-13 + 17 =$	R $-9 - 6 =$	G $7 - 20 =$	T $-15 - 8 =$
I $-3 - 4 =$			

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{l} 13 + 12 = \underline{\quad} \\ 13 - 12 = \underline{\quad} \\ 11 \times 5 = \underline{\quad} \\ 12 \div 4 = \underline{\quad} \\ 14 + 10 = \underline{\quad} \\ 14 - 10 = \underline{\quad} \\ 12 \times 7 = \underline{\quad} \\ 16 \div 8 = \underline{\quad} \\ 15 + 19 = \underline{\quad} \\ 17 + 11 = \underline{\quad} \end{array}$$

## TRENDY TABLES

$$\begin{array}{l} 6 \times 2 = \underline{\quad} \\ 6 \times 3 = \underline{\quad} \\ 6 \times 4 = \underline{\quad} \\ 6 \times \underline{\quad} = 36 \\ 6 \times \underline{\quad} = 42 \\ 6 \times \underline{\quad} = 48 \\ 6 \times 10 = \underline{\quad} \\ 6 \times 11 = \underline{\quad} \\ 6 \times 12 = \underline{\quad} \\ 6 \times \underline{\quad} = 78 \end{array}$$



## SOFT SUBSTITUTES

$$\begin{array}{l} a = 10, \quad a + 4 = \underline{\quad} \\ b = 12, \quad b + 11 = \underline{\quad} \\ c = 11, \quad c - 2 = \underline{\quad} \\ d = 13, \quad d - 4 = \underline{\quad} \\ e = 15, \quad 11 + e = \underline{\quad} \\ f = 14, \quad 19 - f = \underline{\quad} \\ g = 8, \quad 12g = \underline{\quad} \\ h = 16, \quad 2h = \underline{\quad} \\ i = 11, \quad 3i = \underline{\quad} \\ j = 20, \quad 5j = \underline{\quad} \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{l} 12 \text{ ADDED TO } 21 \text{ IS } \underline{\quad} \\ 9 \text{ TIMES } 30 \text{ IS } \underline{\quad} \\ \$10.35 + \$12.45 = \underline{\quad} \\ \$11.60 + \$17.90 = \underline{\quad} \\ 975 = \underline{\quad} + 70 + \underline{\quad} \\ 800 + 60 + 6 = \underline{\quad} \\ 333 + 444 = \underline{\quad} \\ 555 + 222 = \underline{\quad} \\ 450 - 170 = \underline{\quad} \\ 369 - 265 = \underline{\quad} \end{array}$$

## THE QUINTUS QUIZ

-FIND THE COST FOR...

- 1 PARENT AND 1 CHILD  $\underline{\quad}$
- 1 PARENT AND 4 CHILDREN  $\underline{\quad}$
- 2 PARENTS AND 1 CHILD  $\underline{\quad}$
- 2 PARENTS AND 4 CHILDREN  $\underline{\quad}$
- 3 PARENTS AND 3 CHILDREN  $\underline{\quad}$



NUMBER OF MISTAKES  $\underline{\quad}$

## STARTERS

$$-6 \times -6 =$$

$$9 \times -12 =$$

$$-12 \times -9 =$$

$$-10 \times 11 =$$

$$-7 \times -6 =$$

$$-10 \times 10 =$$

$$-6 \times 7 =$$

$$7 \times -6 =$$

$$-10 \times -11 =$$

$$-5 \times -7 =$$

$$-3 \times -4 =$$

$$-5 \times -5 =$$

$$-9 \times 12 =$$

$$-3 \times -7 =$$

$$3 \times -4 =$$

$$3 \times -7 =$$

$$-11 \times -4 =$$

$$5 \times -7 =$$

$$12 \times -6 =$$

**CANNIBAL CODES!** SOLVE THESE PROBLEMS TO ANSWER THE QUESTIONS!

$$\begin{array}{r} M \quad -11 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} F \quad -9 \\ \times -6 \\ \hline \end{array}$$

$$\begin{array}{r} G \quad -4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} D \quad 7 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} Q \quad -5 \\ \times -8 \\ \hline \end{array}$$

$$\begin{array}{r} Y \quad -7 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} R \quad -9 \\ \times -5 \\ \hline \end{array}$$

$$\begin{array}{r} N \quad 8 \\ \times -3 \\ \hline \end{array}$$

$$\begin{array}{r} I \quad -14 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} U \quad -13 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} P \quad -4 \\ \times -9 \\ \hline \end{array}$$

$$\begin{array}{r} H \quad 12 \\ \times -7 \\ \hline \end{array}$$

$$\begin{array}{r} E \quad -15 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} K \quad -20 \\ \times -4 \\ \hline \end{array}$$

$$\begin{array}{r} O \quad 7 \\ \times -7 \\ \hline \end{array}$$

$$\begin{array}{r} T \quad -14 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} S \quad -12 \\ \times -2 \\ \hline \end{array}$$

$$\begin{array}{r} A \quad 15 \\ \times -5 \\ \hline \end{array}$$

$$\begin{array}{r} B \quad -5 \\ \times -12 \\ \hline \end{array}$$

$$\begin{array}{r} V \quad -23 \\ \times 3 \\ \hline \end{array}$$



WHAT IS A CANNIBAL'S FAVOURITE FOOD?

$$\begin{array}{r} \overline{60} \ \overline{-75} \ \overline{80} \ \overline{-90} \ \overline{56} \end{array} \quad \begin{array}{r} \overline{60} \ \overline{-90} \ \overline{-70} \ \overline{-24} \ \overline{-32} \ \overline{24} \end{array}$$

WHAT DID THE CANNIBAL SAY WHEN HE SAW THE MAN ASLEEP?

$$\begin{array}{r} \overline{-75} \ \overline{-84} \end{array} \quad \begin{array}{r} \overline{60} \ \overline{45} \ \overline{-90} \ \overline{-75} \ \overline{80} \ \overline{54} \ \overline{-75} \ \overline{24} \ \overline{-28} \end{array} \quad \begin{array}{r} \overline{-70} \ \overline{-24} \end{array} \quad \begin{array}{r} \overline{60} \ \overline{-90} \ \overline{56} \end{array}$$

HOW DO CANNIBALS COOK SMALL PEOPLE AND COBRAS?

$$\begin{array}{r} \overline{-75} \ \overline{24} \end{array} \quad \begin{array}{r} \overline{24} \ \overline{-24} \ \overline{-75} \ \overline{80} \ \overline{-90} \end{array} \quad \begin{array}{r} \overline{-75} \ \overline{-24} \ \overline{56} \end{array} \quad \begin{array}{r} \overline{36} \ \overline{-14} \ \overline{-32} \ \overline{-88} \ \overline{-14} \end{array} \quad \begin{array}{r} \overline{36} \ \overline{-70} \ \overline{-90} \end{array}$$

## - DIVIDING INTEGERS -

**POSITIVE ÷ POSITIVE =** \_\_\_\_\_

$$9 \div 3 =$$

$$\frac{30}{6} =$$

$$16 \div 4 =$$

$$\frac{25}{5} =$$

$$35 \div 7 =$$

$$\frac{40}{8} =$$

$$48 \div 6 =$$

$$\frac{36}{4} =$$

**POSITIVE ÷ NEGATIVE =** \_\_\_\_\_

$$12 \div -2 =$$

$$30 \div -3 =$$

$$27 \div -9 =$$

$$20 \div -4 =$$

$$45 \div -5 =$$

$$64 \div -8 =$$

$$24 \div -6 =$$

$$56 \div -7 =$$

$$12 \div -1 =$$

$$32 \div -4 =$$

$$21 \div -3 =$$

$$14 \div -7 =$$

**NEGATIVE ÷ POSITIVE =** \_\_\_\_\_

$$-48 \div 6 =$$

$$-21 \div 7 =$$

$$-14 \div 1 =$$

$$-32 \div 8 =$$

$$-60 \div 5 =$$

$$-36 \div 4 =$$

$$-18 \div 2 =$$

$$-24 \div 3 =$$

$$-63 \div 9 =$$

$$-27 \div 3 =$$

$$-32 \div 4 =$$

$$-56 \div 8 =$$

**NEGATIVE ÷ NEGATIVE =** \_\_\_\_\_

$$-10 \div -10 =$$

$$-28 \div -4 =$$

$$\frac{-15}{3} =$$

$$-9 \div -9 =$$

$$-20 \div -5 =$$

$$\frac{-16}{-2} =$$

$$-8 \div -8 =$$

$$-18 \div -6 =$$

$$\frac{-24}{-2} =$$

$$-40 \div -8 =$$

$$-8 \div -4 =$$

$$\frac{-27}{-3} =$$

**WHAT DID THE ASTROLOGER SAY TO THE YOUNG LOVERS?**

**TO FIND THE ANSWER COMPLETE THESE SUMS!**

$$G \frac{-35}{5} =$$

$$R \frac{44}{-11} =$$

$$N \frac{-50}{10} =$$

$$O \frac{-96}{-12} =$$

$$L \frac{-81}{9} =$$

$$A \frac{32}{-4} =$$

$$T \frac{-72}{-8} =$$

$$E \frac{-12}{12} =$$

$$I \frac{-12}{-3} =$$

$$U \frac{100}{20} =$$

$$V \frac{0}{-5} =$$

$$M \frac{49}{7} =$$

$$S \frac{-60}{-6} =$$

$$P \frac{-4}{-4} =$$

$$H \frac{30}{-3} =$$

"

$$\overline{10} \overline{-8} \overline{7} \overline{-1} \quad \overline{10} \overline{4} \overline{-7} \overline{-5} \overline{10} \quad \overline{-7} \overline{4} \overline{0} \overline{-1} \quad \overline{9} \overline{-10} \overline{-1}$$

$$\overline{1} \overline{8} \overline{10} \overline{4} \overline{9} \overline{4} \overline{0} \overline{-1} \quad \overline{-4} \overline{-1} \overline{10} \overline{5} \overline{-9} \overline{9} \quad !$$



# PIRATE PRODUCTS

$8 \times -5 =$

$-2 \times -7 =$

$4 \times 4 =$

$-7 \times -7 =$

$-8 \times 6 =$

$3 \times 7 =$

$-3 \times -9 =$

$9 \times 10 =$

$8 \times 9 =$

$5 \times 9 =$

$-3 \times 10 =$

$6 \times 6 =$

$7 \times -12 =$

$-16 \times -2 =$

$5 \times -4 =$

$-10 \times -6 =$

$-5 \times -5 =$

$17 \times -1 \times 1 =$

$-9 \div 3 =$

$-28 \div 4 =$

$45 \div 3 =$

$26 \div 2 =$

$-44 \div -11 =$

$12 \div -6 =$

$-80 \div -10 =$

$-24 \div 1 =$

$30 \div 5 =$

$77 \div 7 =$

$-36 \div -4 =$

$-20 \div -20 =$

$90 \div 5 =$

$22 \div -1 =$

$-60 \div 6 =$

$-96 \div -8 =$

$250 \div -5 =$

$0 \div -4 =$

NOW SOLVE THESE PROBLEMS AND SHADE IN ALL THE BOXES WITH ANY OF THE CORRECT ANSWERS!

$-6 \times 5 =$

$-4 \times -8 =$

$3 \times -12 =$

$15 \times 7 =$

$-4 \times -9 =$

$-8 \times -14 =$

$-6 \times -16 =$

$5 \times -20 =$

$-20 \div 4 =$

$-84 \div 12 =$

$-28 \div -7 =$

$-81 \div -9 =$

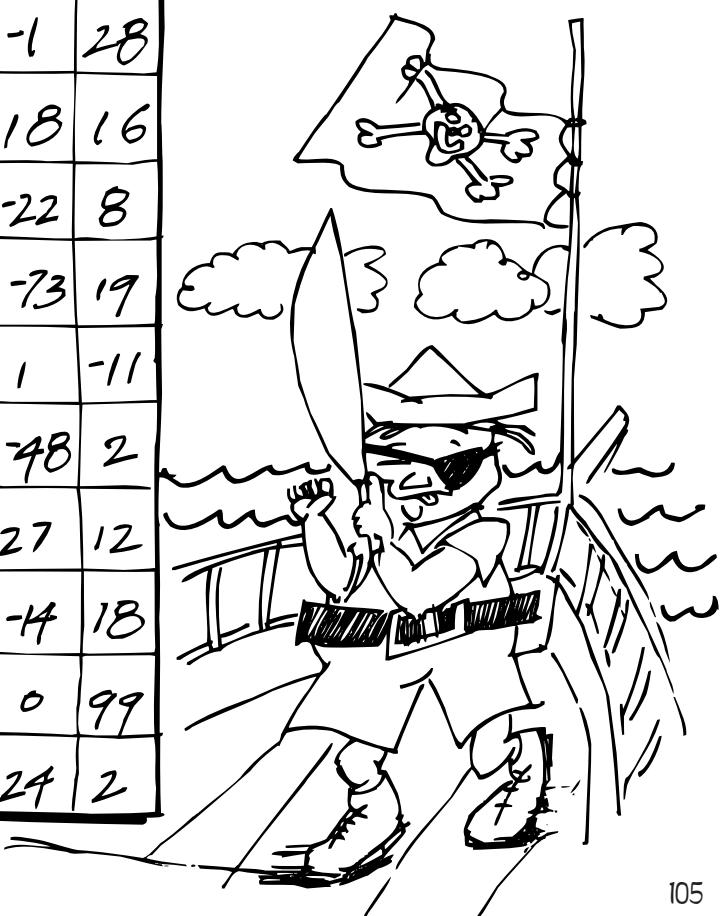
$-15 \div 5 =$

$39 \div -3 =$

$51 \div -3 =$

$51 \div -17 =$

15	-10	0	14	44	-30	13	40	-1	28
8	-2	55	75	32	16	105	14	18	16
1	74	19	42	33	-36	15	12	-22	8
2	29	26	47	-6	36	-76	6	-73	19
11	-10	15	1	14	112	29	15	1	-11
2	20	10	0	-2	96	2	12	-48	2
-12	52	14	4	89	-3	-6	-5	27	12
50	49	-1	9	60	-17	-1	-7	-14	18
18	8	12	0	-100	26	-13	1	0	99
0	-16	21	22	18	-1	14	0	24	2





- INTO EVERYTHING -  
D.J. ELAINE EQUAL  
HAS THESE SUMS FOR YOU TO SOLVE!  
SO GO TO iT!

$6+4 =$	$-6+4 =$	$-6-4 =$
$11+7 =$	$-11+7 =$	$8-8 =$
$-8+8 =$	$-8-8 =$	$-13+6 =$
$-13-6 =$	$5-5 =$	$-5+5 =$
$-12+3 =$	$-7-2 =$	$4-1 =$
$-8-2 =$	$-10+1 =$	$-9+9 =$
$-9-9 =$	$-2-2 =$	$-2+2 =$
$40 \div 8 =$	$-40 \div 8 =$	$40 \div -8 =$
$-50 \div 5 =$	$50 \div -5 =$	$-60 \div 12 =$
$-60 \div -12 =$	$-100 \div 4 =$	$100 \div -4 =$

WHAT DID D.J. ELAINE EQUAL SAY WHEN SHE LOOKED IN HER PIGGY BANK. SHADE IN ALL THE SQUARES THAT CONTAIN A MISTAKE TO FIND OUT!

X	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5
-8	42	-40	24	24	-16	-8	0	8	-16	24	-32	-40
-7	42	-35	28	21	-14	7	0	7	-14	21	-28	-35
-6	36	-30	24	18	-12	6	0	6	-12	18	-24	-30
-5	-30	-25	-20	15	-10	-5	0	5	10	15	-20	-25
-4	24	20	16	12	8	4	R	-4	-8	-12	-16	-20
-3	18	15	12	9	6	3		-3	-6	-9	-12	-15
-2	-12	10	8	6	-4	2	0	-2	-4	6	-2	10
-1	-6	-5	4	-3	-2	1	0	-1	-2	-3	4	-5
0	-6	0	-4	0	-2	0	0	0	0	0	4	0
1	6	-5	-4	-3	2	-1	0	1	2	3	-4	5



# - SIGNS IN OUR TIMES -

TIME YOURSELF FOR THIS PAGE!

HELP MAXINE MINUS TO WRITE THESE NUMBERS IN ORDER, SMALLEST THROUGH TO LARGEST!

5	8	1	7	4	_____
6	-4	-5	-8	0	_____
-3	2	8	0	-4	_____
-7	5	7	-2	3	_____
0	-6	-4	-8	1	_____
3	-3	8	1	-1	_____



## CALCULATE BY - ADDING & SUBTRACTING

$-6 + 5 =$	$-7 - 2 =$	$-8 - 5 =$	$-9 + 4 =$
$-12 + 6 =$	$-3 + 7 =$	$-2 - 6 =$	$-8 + 9 =$
$-1 + 1 =$	$9 - 6 =$	$6 - 9 =$	$8 - 12 =$
$-7 - 8 =$	$-12 - 4 =$	$6 + 5 =$	$-4 + 2 =$
$-8 + 3 =$	$-4 + 9 =$	$-13 - 8 =$	$-7 + 13 =$

## - DIVIDING

$40 \div 5 =$	$-50 \div 5 =$	$60 \div -5 =$	$39 \div -3 =$
$-69 \div 3 =$	$-96 \div -3 =$	$-24 \div 4 =$	$48 \div -4 =$
$-72 \div -4 =$	$28 \div -7 =$	$-56 \div -8 =$	$-48 \div 6 =$

## - MULTIPLYING

$10 \times -4 =$	$-8 \times -5 =$	$-7 \times 3 =$	$-6 \times 9 =$
$-9 \times -2 =$	$8 \times -8 =$	$-8 \times -3 =$	$0 \times -1 =$
$-4 \times -5 =$	$7 \times -8 =$	$-4 \times -7 =$	$6 \times -12 =$

USE A  $>$  OR  $<$  SIGN TO MAKE THESE SENTENCES TRUE!

$7 \underline{\quad} 5$	$9 \underline{\quad} -2$	$-3 \underline{\quad} 6$	$-7 \underline{\quad} 7$
$4 \underline{\quad} -3$	$7 \underline{\quad} -8$	$5 \underline{\quad} 2$	$-6 \underline{\quad} -4$

TIME TAKEN \_\_\_\_\_

NUMBER CORRECT \_\_\_\_\_

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$17 + 14 = \underline{\hspace{2cm}}$

$18 - 11 = \underline{\hspace{2cm}}$

$15 \times 6 = \underline{\hspace{2cm}}$

$16 \div 4 = \underline{\hspace{2cm}}$

$18 + 13 = \underline{\hspace{2cm}}$

$13 - 12 = \underline{\hspace{2cm}}$

$12 \times 11 = \underline{\hspace{2cm}}$

$15 \div 5 = \underline{\hspace{2cm}}$

$19 + 16 = \underline{\hspace{2cm}}$

$13 + 17 = \underline{\hspace{2cm}}$

**17**

## MIGHTY METRICS

$70 \text{ sec} + 50 \text{ sec} = \underline{\hspace{2cm}}$

$38 \text{ sec} + 26 \text{ sec} = \underline{\hspace{2cm}}$

$69 \text{ m} - 49 \text{ m} = \underline{\hspace{2cm}}$

$43 \text{ km} - 27 \text{ km} = \underline{\hspace{2cm}}$

$1000 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$

$5000 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$

$\underline{\hspace{2cm}} \text{ mg} = 2 \text{ g}$

$\underline{\hspace{2cm}} \text{ mg} = 2.5 \text{ g}$

$\underline{\hspace{2cm}} \text{ cm} = 3 \text{ m}$

$\underline{\hspace{2cm}} \text{ cm} = 3.5 \text{ m}$

## FANTASTIC FRACTIONS

$\frac{1}{2} \text{ OF } 6 = \underline{\hspace{2cm}}$

$\frac{1}{2} \text{ OF } 10 = \underline{\hspace{2cm}}$

$\frac{1}{2} \text{ OF } 12 = \underline{\hspace{2cm}}$

$\frac{1}{2} \text{ OF } 18 = \underline{\hspace{2cm}}$

$\frac{1}{4} \times \frac{1}{4} = \underline{\hspace{2cm}}$

$\frac{2}{7} \times \frac{5}{9} = \underline{\hspace{2cm}}$

$\frac{1}{4} + \frac{1}{4} = \underline{\hspace{2cm}}$

$\frac{3}{5} + \frac{1}{5} = \underline{\hspace{2cm}}$

$\frac{1}{4} - \frac{1}{4} = \underline{\hspace{2cm}}$

$\frac{4}{5} - \frac{3}{5} = \underline{\hspace{2cm}}$

## EXTRA EXAMPLES

$30 \text{ DAYS} = \underline{\hspace{2cm}} \text{ MONTH}$

$\underline{\hspace{2cm}} \text{ MINUTES IN 1 HOUR}$

$1.4 + 1.3 = \underline{\hspace{2cm}}$

$2.7 - 1.5 = \underline{\hspace{2cm}}$

$0.4 \times 6 = \underline{\hspace{2cm}}$

$1.2 \div 4 = \underline{\hspace{2cm}}$

$6, 12, \underline{\hspace{2cm}}, 48, \underline{\hspace{2cm}}$

$975 + 579 = \underline{\hspace{2cm}}$

$420 - 24 = \underline{\hspace{2cm}}$

$5^2 = \underline{\hspace{2cm}}$

## THE QUINTUS QUIZ

- FIND THE COST OF...

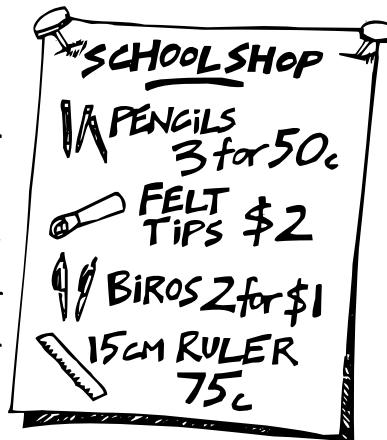
10 FELT TIPS                   

12 PENCILS                   

10 RULERS                   

20 BIROS                   

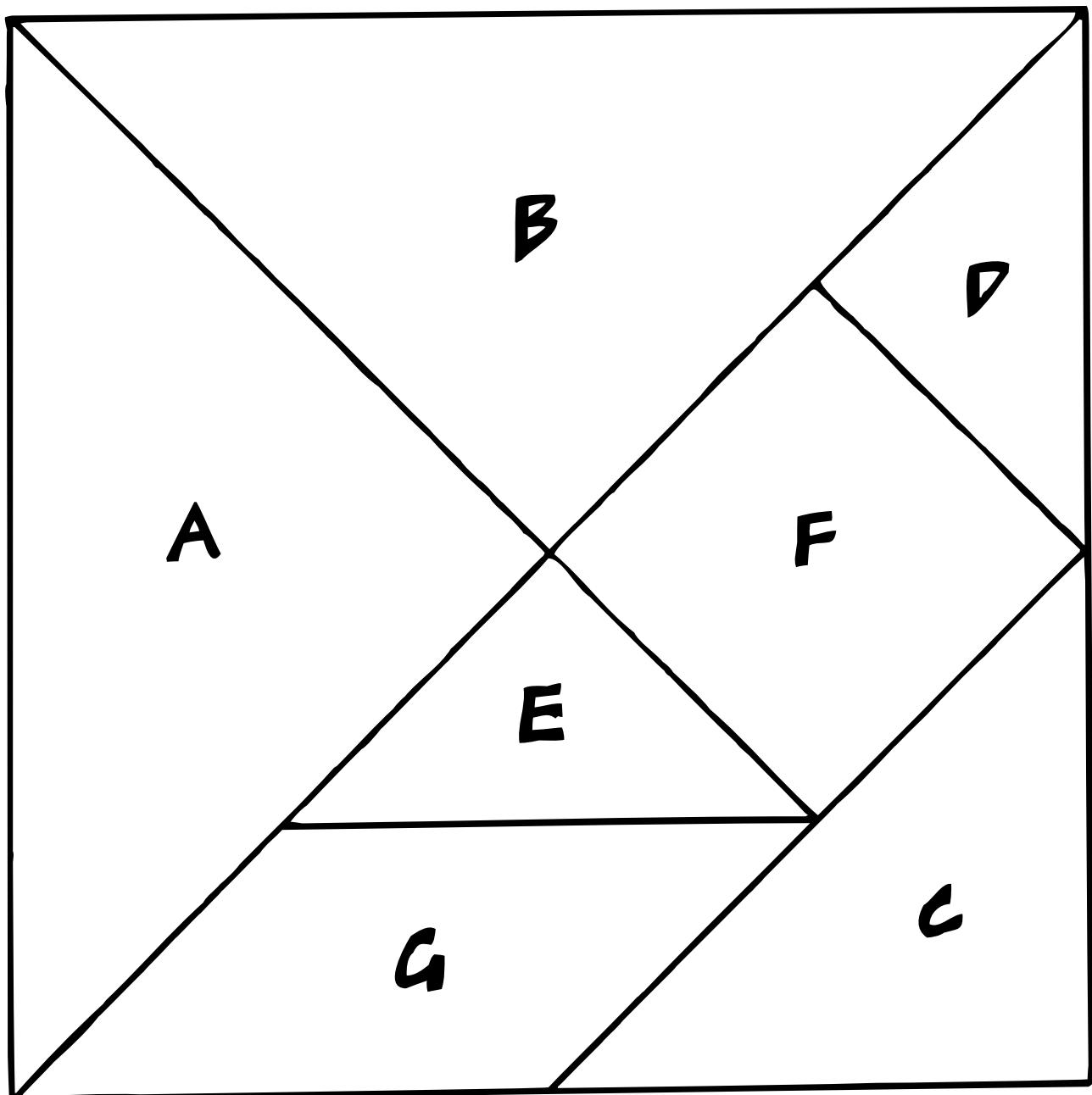
12 PENCILS & 12 RULERS                   



NUMBER OF MISTAKES

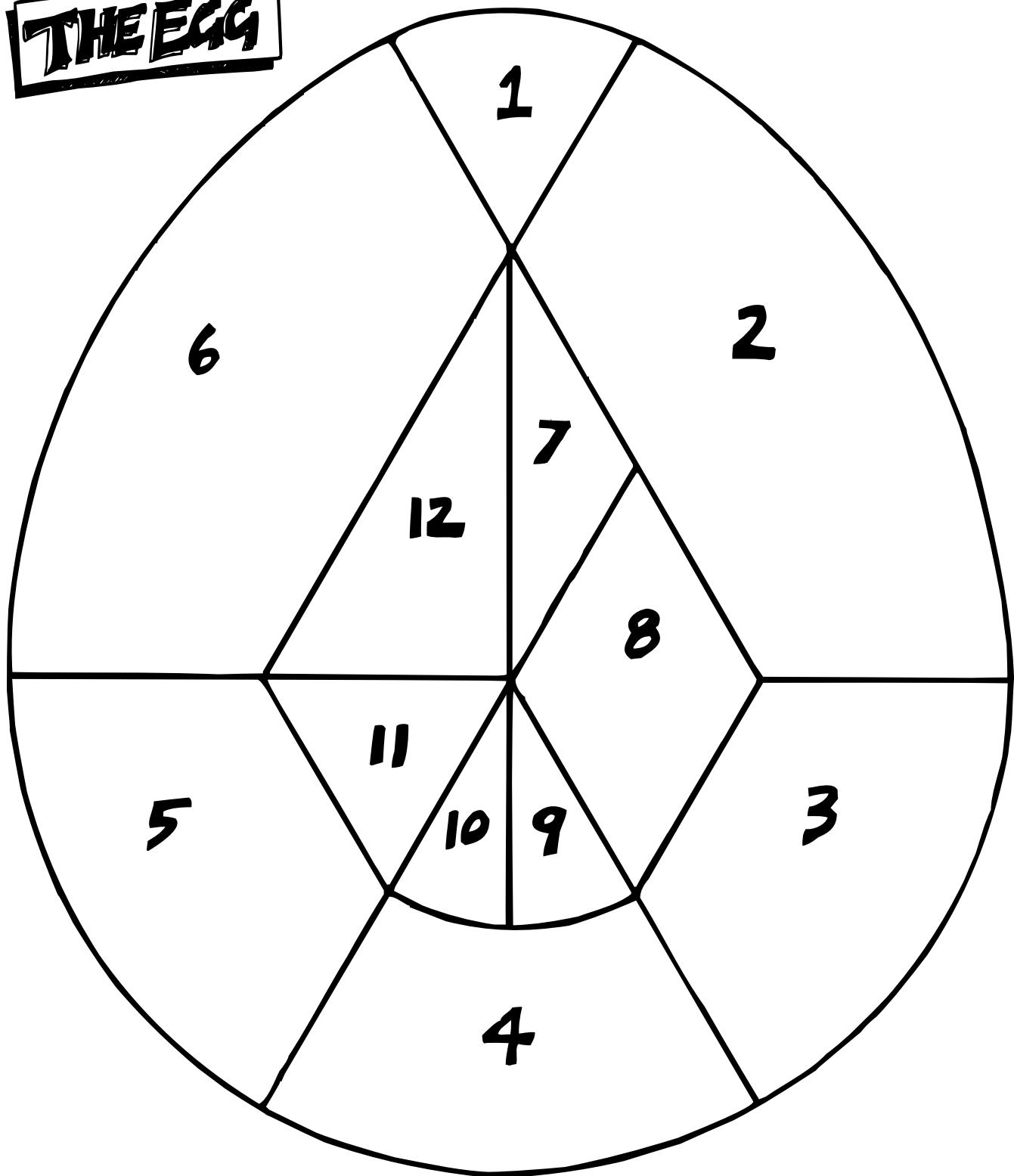
CHOOSE WHETHER YOU WANT TO CUT OUT THE TANGRAM OR THE EGG. THEN TRY TO MAKE THE SHAPES ON THE NEXT PAGE!

### THE TANGRAM

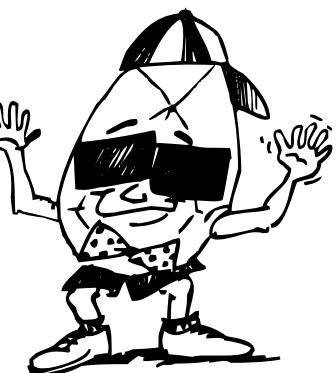


- MAYBE EVEN INVENT  
SOME SHAPES OF  
YOUR OWN!

# THE EGG

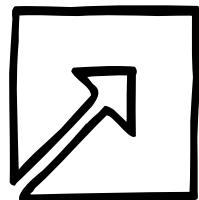


EPPIE EGG IS ONE SMART DUDE!  
UNLIKE HIS COUSIN HUMPTY-DUMPTY,  
WHO JUST COULDN'T BE PUT BACK  
TOGETHER, EPPIE HAS DIVIDED  
HIMSELF SO HE CAN ALWAYS FORM  
AN EGG, AND NOT ONLY THAT, HE  
CAN CHANGE INTO HEAPS OF OTHER  
EXCITING SHAPES!

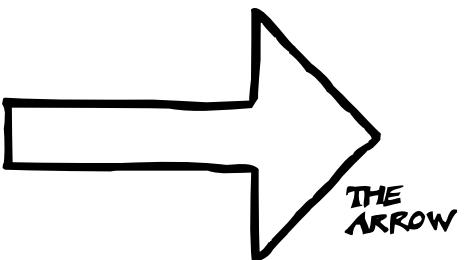


**- HERE ARE JUST SOME  
OF THE MANY SHAPES  
YOU CAN MAKE!!**

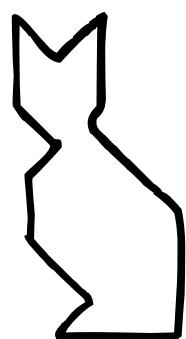
TANGRAM



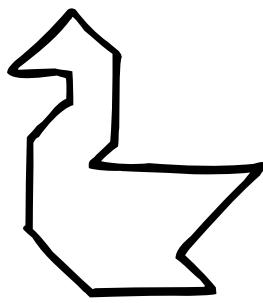
ARROW  
IN A BOX



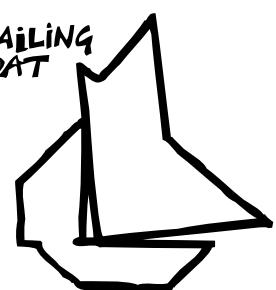
THE  
ARROW



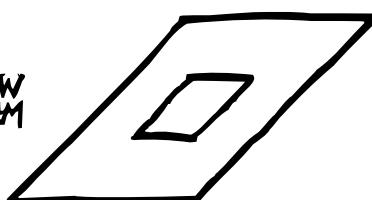
CAT



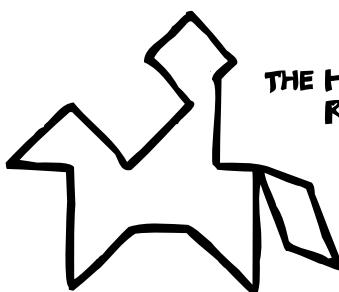
SWAN



SAILING  
BOAT

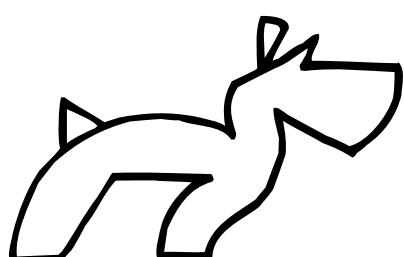


THE HOLLOW  
PARALLELOGRAM

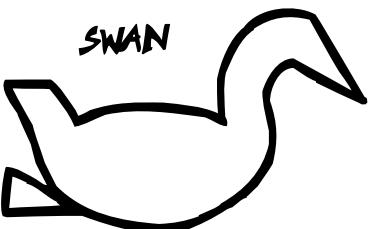


THE HORSE AND  
RIDER

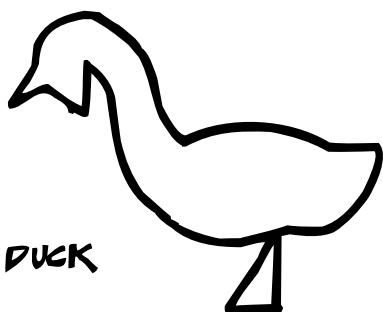
**THE EGG**



DOG



SWAN



STANDING DUCK

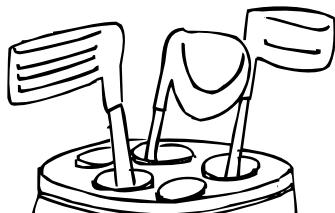


BOAT

# ABSOLUTELY AWESOME MATHS GOLF!

## -HOW TO PLAY

YOU ARE ALLOWED 3 TYPES OF GOLF CLUB  
-CLUB 1  
-CLUB 2  
-CLUB 5



YOU CAN HIT WITH ONE OF THE FOLLOWING STRENGTHS  
-STRENGTH 3  
-STRENGTH 4  
-STRENGTH 6

COMBINING THE CLUBS WITH STRENGTH,  
CLUB 2, STRENGTH 6  
 $= 2 \times 6$   
DISTANCE COVERED  
 $= 12 \text{ m}$

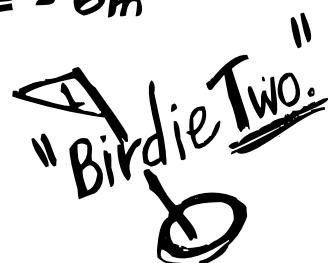
### EXAMPLE 1

HOLE DISTANCE = 26 m

STROKE 1: CLUB 5, STRENGTH 4 =  $5 \times 4$   
DISTANCE = 20 m

STROKE 2: CLUB 2, STRENGTH 3 =  $2 \times 3$   
DISTANCE = 6 m

TOTAL DISTANCE:  $20 + 6 = 26 \text{ m}$



### EXAMPLE 2

(YOU CAN ALSO HIT BACKWARDS!)

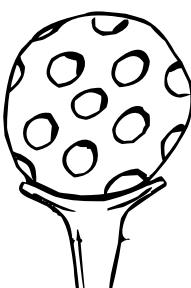
HOLE DISTANCE = 24 m

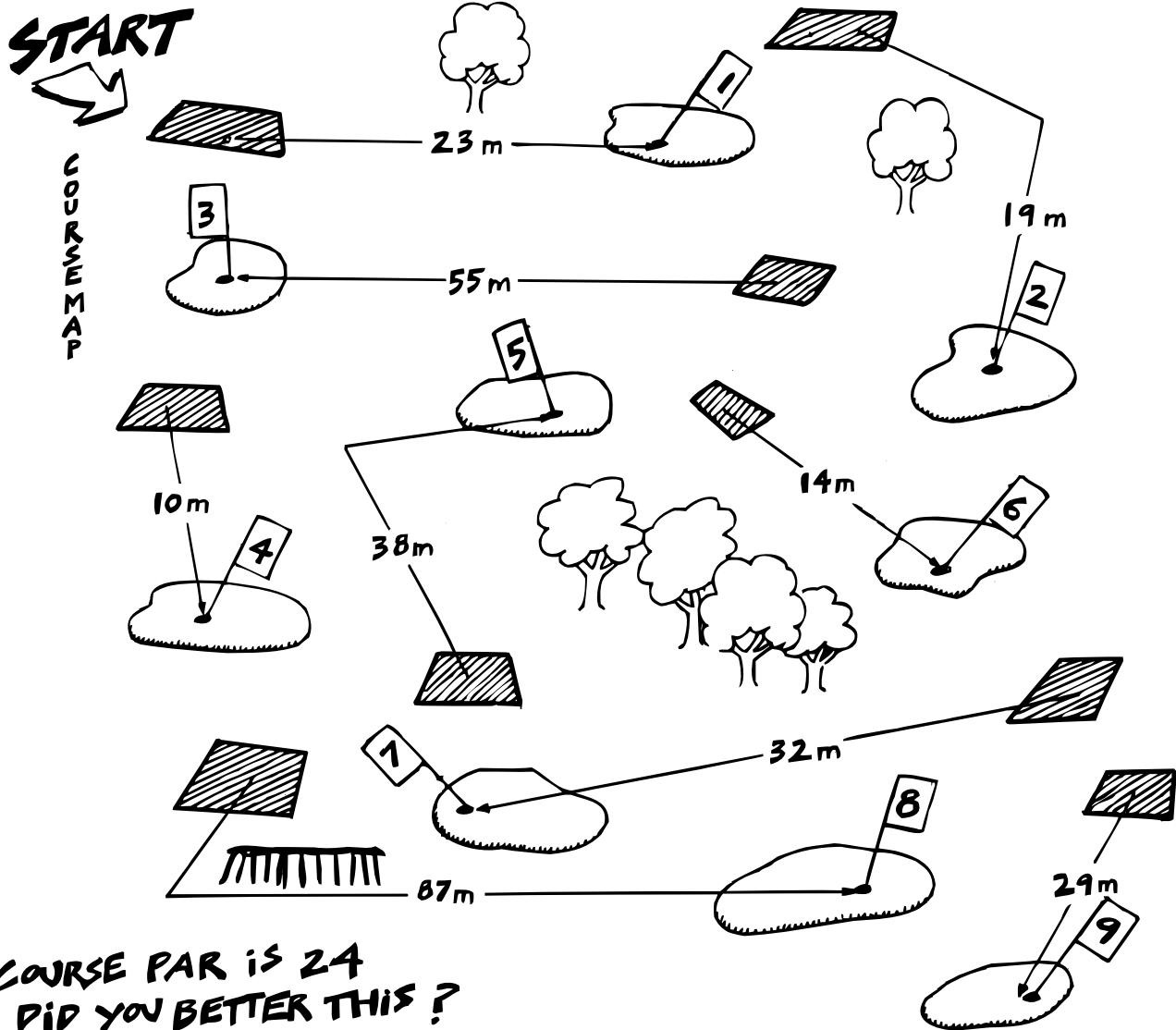
STROKE 1: CLUB 5, STRENGTH 6 =  $5 \times 6$   
DISTANCE = 30 m

STROKE 2: CLUB 2, STRENGTH 3 =  $2 \times 3$   
DISTANCE = 6 m

TOTAL DISTANCE:  $30 - 6 = 24 \text{ m}$

-TIME TO TEE-OFF!





**COURSE PAR IS 24  
DID YOU BETTER THIS?**

HOLE	DISTANCE	CLUB & STRENGTH	STROKES
1	23 m		
2	19 m		
3	55 m		
4	10 m		
5	38 m		
6	14 m		
7	32 m		
8	87 m		
9	29 m		
<b>TOTAL</b>			

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{ll} 15+15 = \underline{\quad} & 22-18 = \underline{\quad} \\ 14+14 = \underline{\quad} & 15+19 = \underline{\quad} \\ 20-3 = \underline{\quad} & 20\div 10 = \underline{\quad} \\ 3\times 36 = \underline{\quad} & 15\times 5 = \underline{\quad} \\ 65+9 = \underline{\quad} & 66+66 = \underline{\quad} \\ 57-9 = \underline{\quad} & 66\times 2 = \underline{\quad} \\ 107-11 = \underline{\quad} & 105-22 = \underline{\quad} \\ 3\times 80 = \underline{\quad} & 100\div 25 = \underline{\quad} \\ 200\div 4 = \underline{\quad} & 50\times 6 = \underline{\quad} \\ 27\div 9 = \underline{\quad} & 24\times 3 = \underline{\quad} \end{array}$$

## TELLING TABLES

$$\begin{array}{l} 5 \times 6 = \underline{\quad} \\ 5 \times 3 = \underline{\quad} \\ 5 \times 7 = \underline{\quad} \\ 5 \times 10 = \underline{\quad} \\ 5 \times 12 = \underline{\quad} \\ 5 \times 8 = \underline{\quad} \\ 5 \times 4 = \underline{\quad} \\ 5 \times 11 = \underline{\quad} \\ 5 \times 9 = \underline{\quad} \\ 5 \times 5 = \underline{\quad} \end{array}$$



WK

## POSSIBLE PATTERNS

$$\begin{array}{ll} 999 \times 2 = \underline{\quad} & 55 \times 5 = \underline{\quad} \\ 999 \times 3 = \underline{\quad} & 555 \times 5 = \underline{\quad} \\ 999 \times 4 = \underline{\quad} & 5555 \times 5 = \underline{\quad} \\ 999 \times 5 = \underline{\quad} & 55555 \times 5 = \underline{\quad} \\ 999 \times 6 = \underline{\quad} & 1 \times 1 = \underline{\quad} \\ 999 \times 7 = \underline{\quad} & 11 \times 11 = \underline{\quad} \\ 999 \times 8 = \underline{\quad} & 111 \times 111 = \underline{\quad} \\ 999 \times 9 = \underline{\quad} & 1111 \times 1111 = \underline{\quad} \end{array}$$

## SNACK TIME!

### MAGIC MENU

HAMBURGER  
\$2.50

### CHEESEBURGER

\$2

CHIPS

MIN \$1.50

SALAD

\$1.90

COKE

SMALL MED LARGE  
\$1.50 \$1.90 \$2.50

WHAT IS THE COST OF :

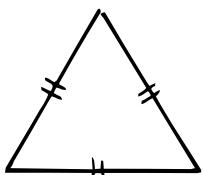
- 1 HAMBURGER , \$1.50 CHIPS ,  
SMALL COKE \_\_\_\_\_
- \$2 CHIPS , SALAD , LARGE COKE  
\_\_\_\_\_
- 2 CHEESEBURGERS MEDIUM COKE ,  
\$1.50 CHIPS \_\_\_\_\_
- 4 SALADS , \$5 CHIPS , 3 SMALL COKES  
\_\_\_\_\_

NUMBER OF MISTAKES \_\_\_\_\_

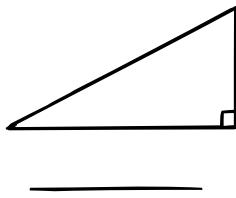
# FILL IN THE INFORMATION ABOUT POLYGONS!

A TRIANGLE HAS \_\_\_\_ SIDES

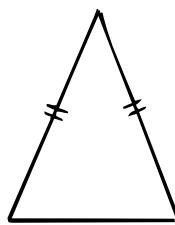
- TYPES OF TRIANGLES



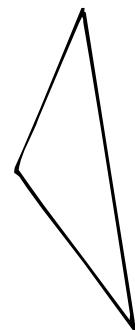
\_\_\_\_\_



\_\_\_\_\_



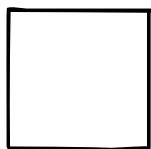
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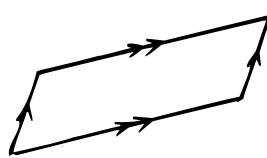
\_\_\_\_\_

A QUADRILATERAL HAS \_\_\_\_ SIDES

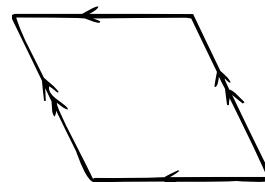
- TYPES OF QUADRILATERALS



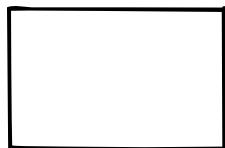
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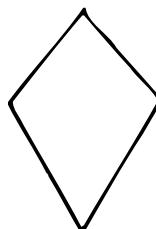
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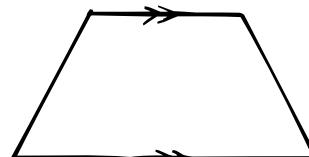
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



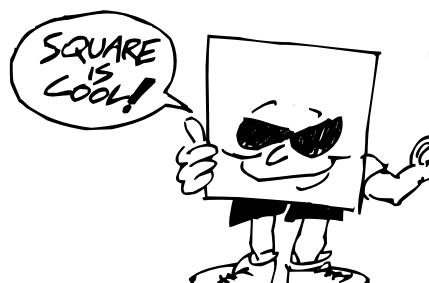
\_\_\_\_\_

A PENTAGON HAS \_\_\_\_ SIDES

A \_\_\_\_\_ HAS 6 SIDES

A \_\_\_\_\_ HAS 7 SIDES

AN OCTAGON HAS \_\_\_\_ SIDES



ANSWERS

HEPTAGON

4 RECTANGLE

ISOSCELES

HEXAGON

3

RHOMBUS

KITE

SQUARE

RIGHT ANGLE

5

EQUILATERAL

PARALLELOGRAM

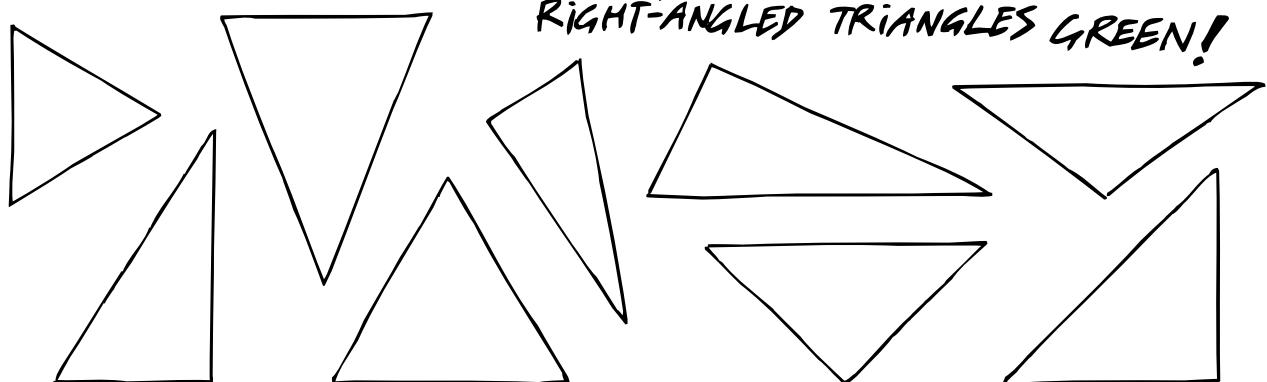
8 TRAPEZIUM

SCALENE

# TRIGONS GALORE

TRIGON	ACTIVITY	TYPE OF TRIANGLE	HISTORY
	MEASURE THE LENGTH OF EACH SIDE. $LU = \underline{\hspace{2cm}}$ $UV = \underline{\hspace{2cm}}$ $VL = \underline{\hspace{2cm}}$ Did you discover that each side is the same length? _____	_____	LATIN; AEQUI, LATERA EQUAL SIDES
	MEASURE THE LENGTH OF EACH SIDE. $WE = \underline{\hspace{2cm}}$ $EQ = \underline{\hspace{2cm}}$ $DW = \underline{\hspace{2cm}}$ Are there two sides equal in length? _____ Which: _____	_____	GREEK, ISOS, SKELOS EQUAL LEGS
	MEASURE EACH SIDE OF THIS TRIANGLE. $JO = \underline{\hspace{2cm}}$ $OY = \underline{\hspace{2cm}}$ $YJ = \underline{\hspace{2cm}}$ Are any sides the same length? _____	_____	TRIANGLE-LATIN; TRI, ANGULI THREE CORNERS

NOW DECIDE WHAT TYPE OF TRIANGLE EACH IS.  
COLOUR EQUILATERAL TRIANGLES RED, ISOSCELES TRIANGLES BLUE, & RIGHT-ANGLED TRIANGLES GREEN!

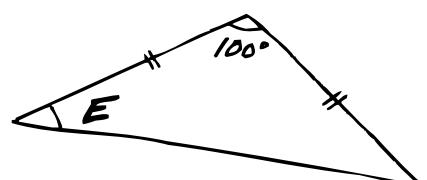
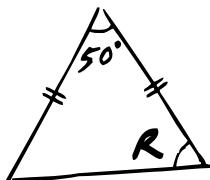
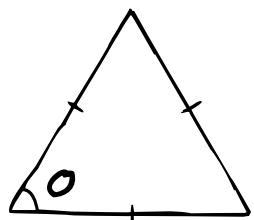
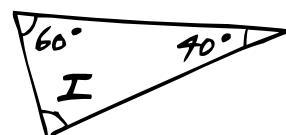
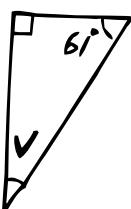
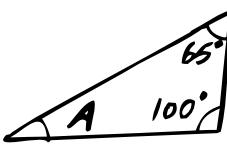
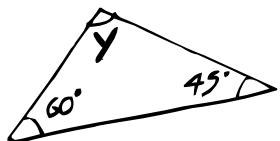
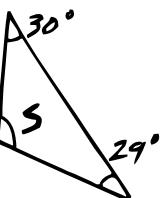
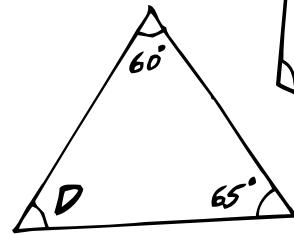
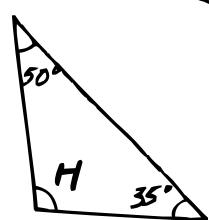
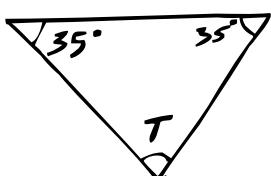
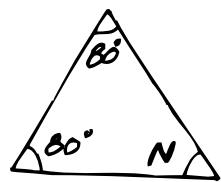
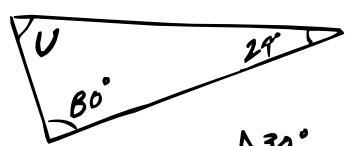
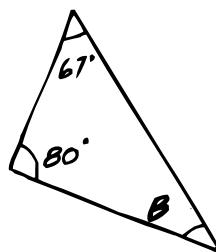
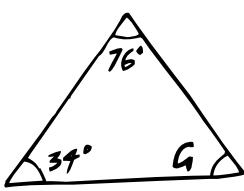
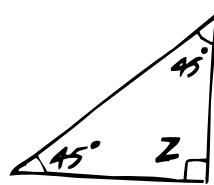


EXPLORE THE TRIANGLES BELOW BY MEASURING EACH ANGLE & COMPLETING THE TABLE!

ANGLE A = _____	ANGLE D = _____	ANGLE G = _____
ANGLE B = _____	ANGLE E = _____	ANGLE H = _____
ANGLE C = _____	ANGLE F = _____	ANGLE I = _____
SUM OF ANGLES = _____	SUM OF ANGLES = _____	SUM OF ANGLES = _____
A _____ TRIANGLE.	AN _____ TRIANGLE.	AN _____ TRIANGLE.

# TRIANGLES ARE HOT!

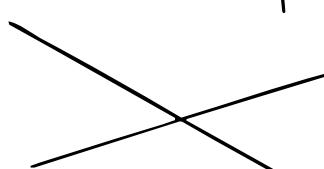
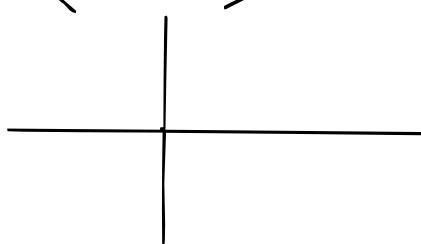
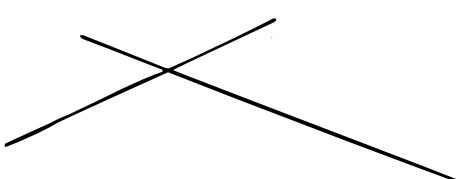
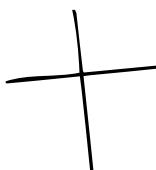
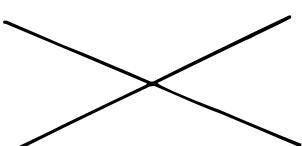
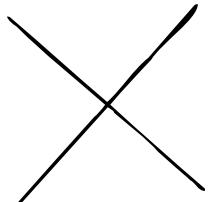
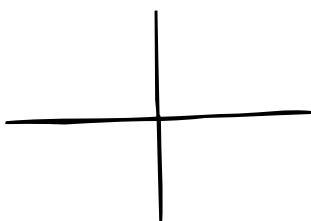
FILL IN THE MISSING ANGLE ON THE TRIANGLES BELOW  
TO DISCOVER A FACT ABOUT TRIANGLES



"THE SUM OF THE ANGLES OF A TRIANGLE IS...

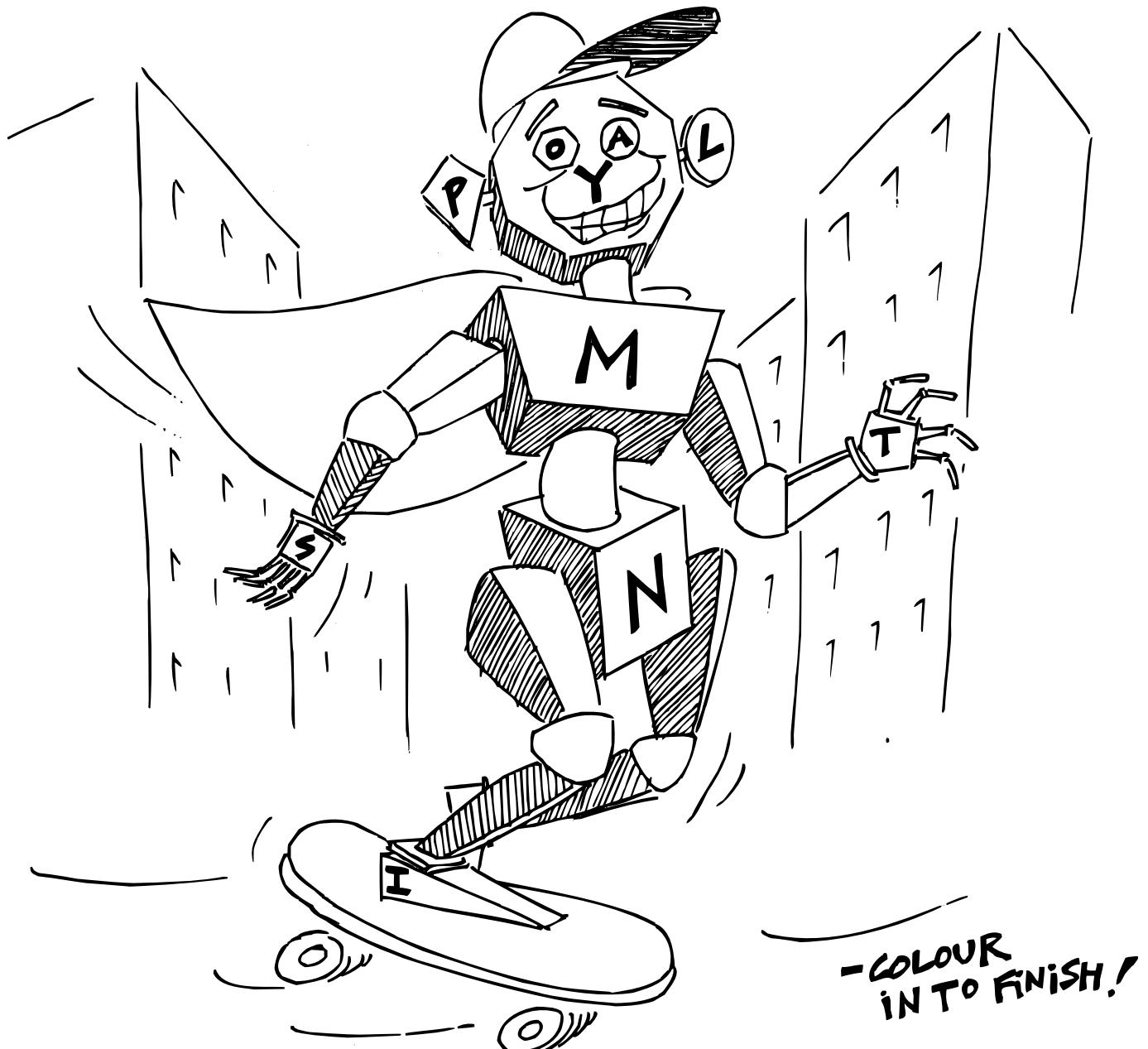
...  $60^\circ + 20^\circ + 90^\circ = 95^\circ + 76^\circ + 20^\circ = 55^\circ + 65^\circ + 40^\circ = 55^\circ + 15^\circ + 20^\circ = 55^\circ + 40^\circ + 80^\circ = 70^\circ + 95^\circ + 110^\circ = 75^\circ + 40^\circ + 70^\circ = 65^\circ + 40^\circ + 120^\circ = 15^\circ + 33^\circ + 60^\circ = 29^\circ + 40^\circ + 90^\circ = 40^\circ + 65^\circ + 60^\circ$ !"

NOW DRAW QUADRILATERALS AROUND THE FOLLOWING PAIRS OF DIAGONALS!



# -MEET EVERY MATHEMATICIANS HERO!

WRITE THE CORRECT LETTER ABOVE THE POLYGON  
IT REPRESENTS !



TRIANGLE	PENTAGON	SQUARE	KITE	HEXAGON	ELLIPSE	OCTAGON	TRAPEZIUM	CIRCLE	RECTANGLE
----------	----------	--------	------	---------	---------	---------	-----------	--------	-----------

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$38 - 12 =$ _____	$58 - 27 =$ _____	$7 \times 8 =$ _____
$15 + 19 =$ _____	$63 + 42 =$ _____	$7 \times 5 =$ _____
$27 - 15 =$ _____	$18 - 15 =$ _____	$7 \times 9 =$ _____
$4 \times 33 =$ _____	$35 \div 7 =$ _____	$7 \times 12 =$ _____
$74 + 8 =$ _____	$45 \div 9 =$ _____	$7 \times 11 =$ _____
$8 \times 40 =$ _____	$18 \times 3 =$ _____	$7 \times 3 =$ _____
$8 \times 30 =$ _____	$4 \times 15 =$ _____	$7 \times 6 =$ _____
$360 \div 6 =$ _____	$72 + 70 =$ _____	$7 \times 10 =$ _____
$480 \div 4 =$ _____	$49 \div 7 =$ _____	$7 \times 8 =$ _____
$97 + 13 =$ _____	$108 - 15 =$ _____	$7 \times 4 =$ _____

## TRENDY TABLES

$7 \times 8 =$ _____
$7 \times 5 =$ _____
$7 \times 9 =$ _____
$7 \times 12 =$ _____
$7 \times 11 =$ _____
$7 \times 3 =$ _____
$7 \times 6 =$ _____
$7 \times 10 =$ _____
$7 \times 8 =$ _____
$7 \times 4 =$ _____

## POSSIBLE PATTERNS

$1 \times 9 + 2 =$ _____	$37 \times 3 =$ _____
$12 \times 9 + 3 =$ _____	$37 \times 6 =$ _____
$123 \times 9 + 4 =$ _____	$37 \times 9 =$ _____
$1234 \times 9 + 5 =$ _____	$37 \times 12 =$ _____
$12345 \times 9 + 6 =$ _____	$37 \times 15 =$ _____

## MAIL MIXTURES

WHAT COMBINATION OF 40¢ AND 50¢ STAMPS DO YOU NEED TO POST LETTERS WITH THESE AMOUNTS?



\$1.40 \_\_\_\_\_



\$1.30 \_\_\_\_\_

\$1.70 \_\_\_\_\_

\$3.30 \_\_\_\_\_

\$5.20 \_\_\_\_\_

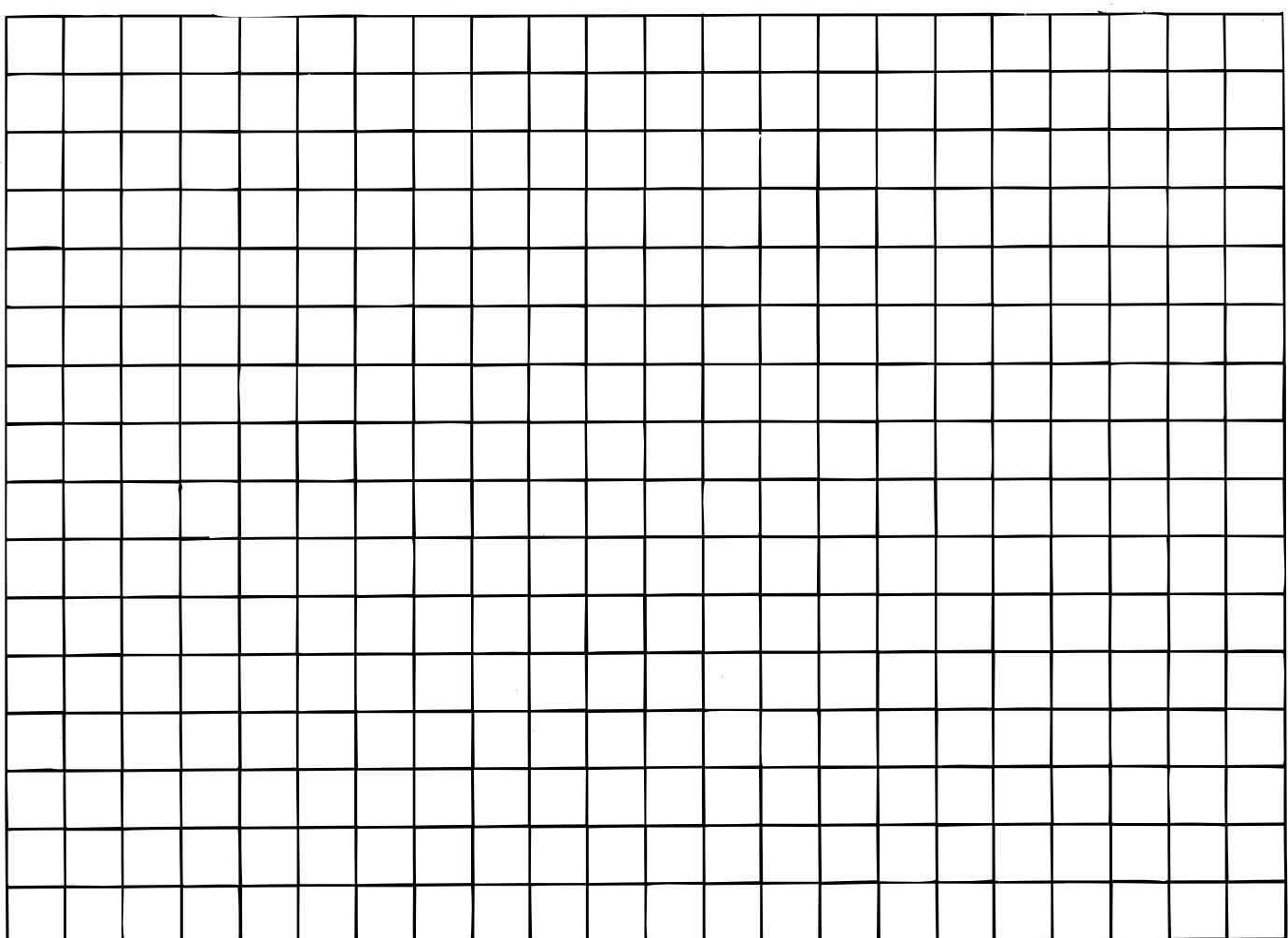
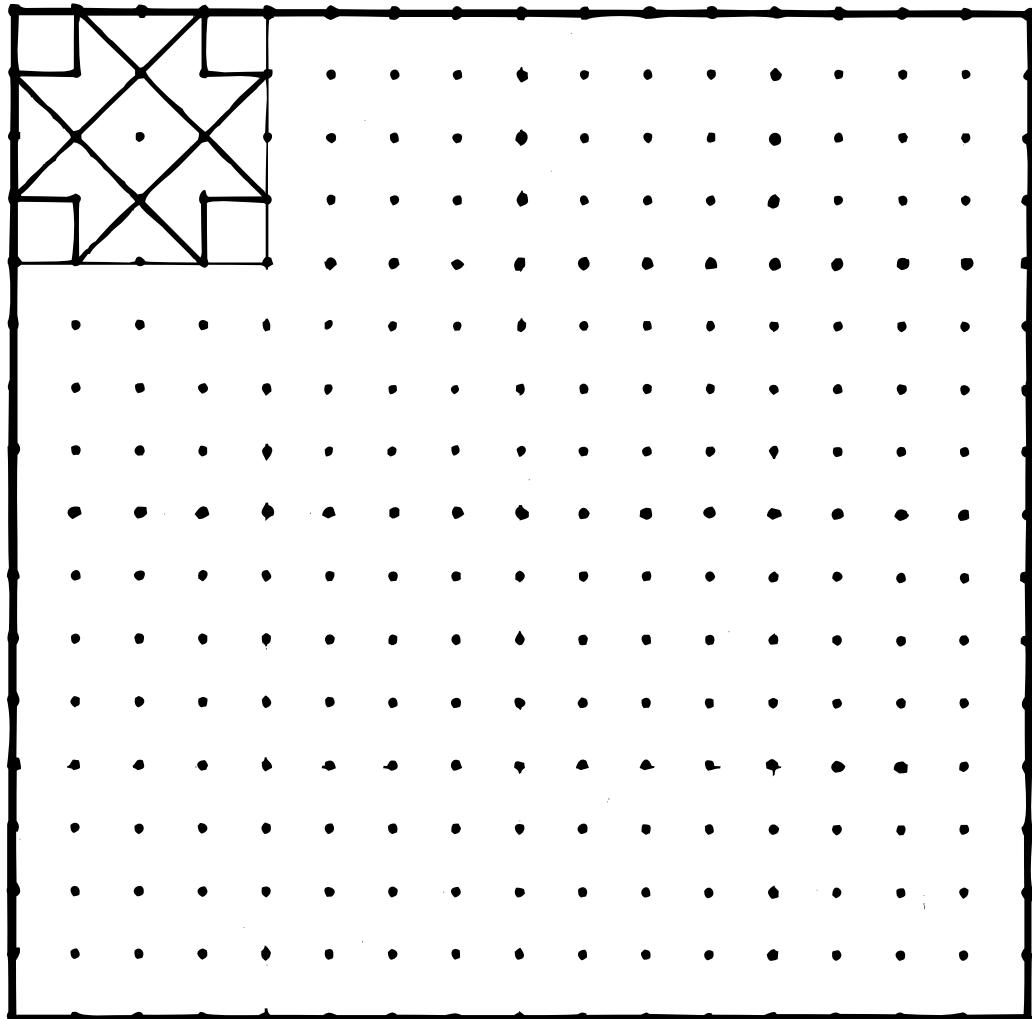
NUMBER OF MISTAKES \_\_\_\_\_

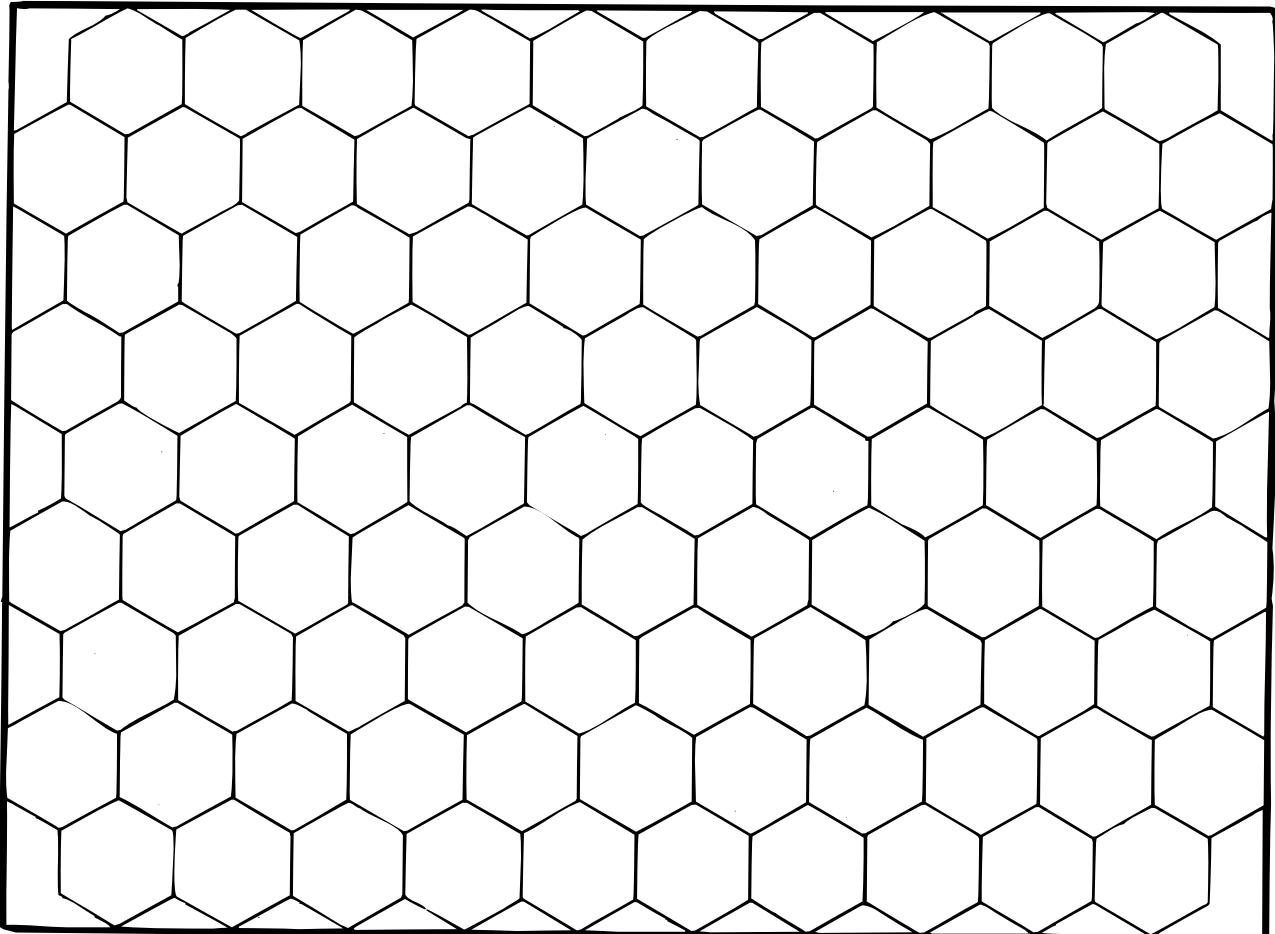


**REPEAT THIS  
PATTERN →  
IN ALL THE  
OTHER SQUARES  
NOW COLOUR  
YOUR DESIGN!**

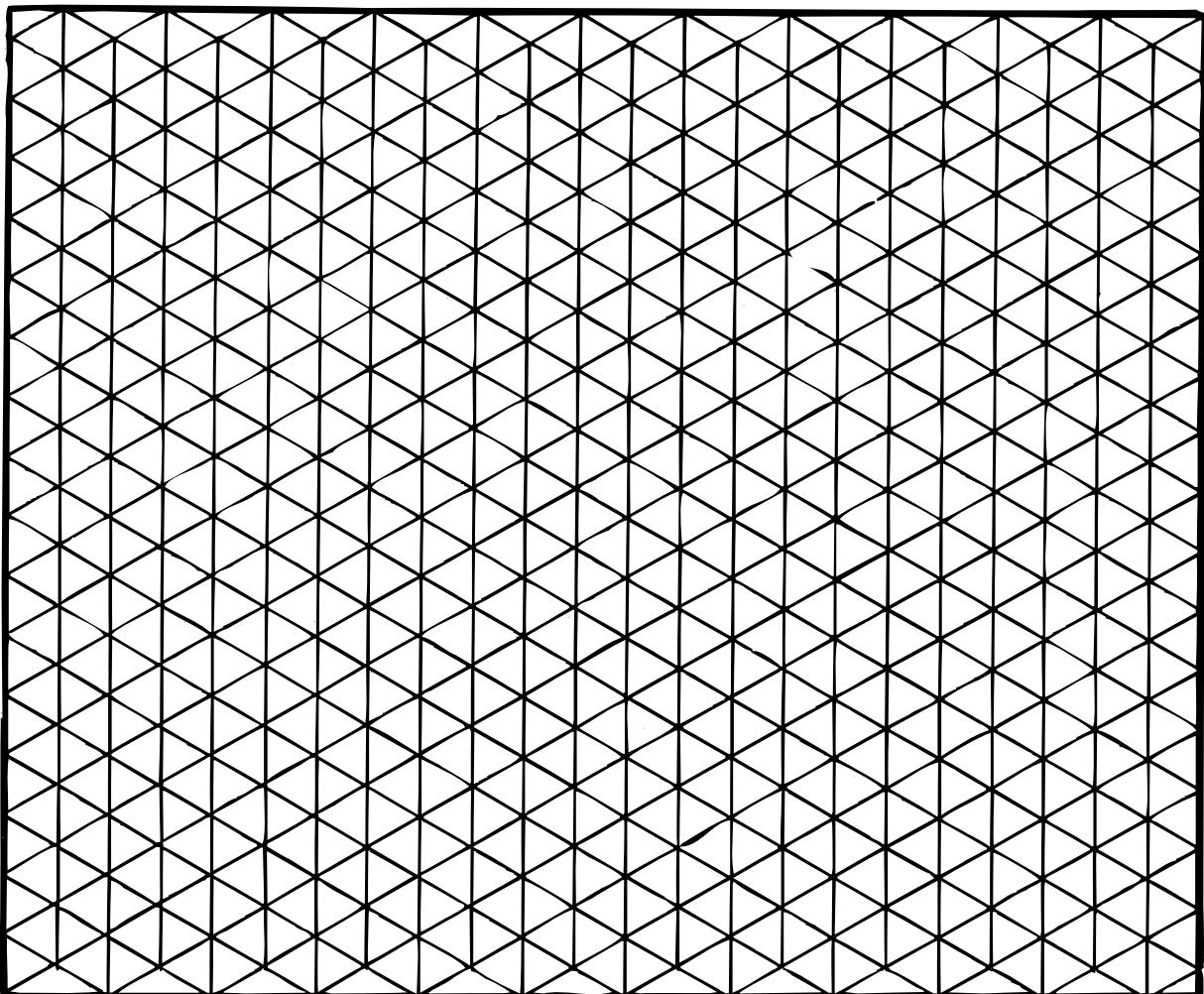
**WHEN YOU  
REPEAT  
PATTERNS  
LIKE THIS YOU  
ARE DRAWING A  
TESSELATION**

**NOW DESIGN  
IN THE  
SQUARES  
BELOW ↓**

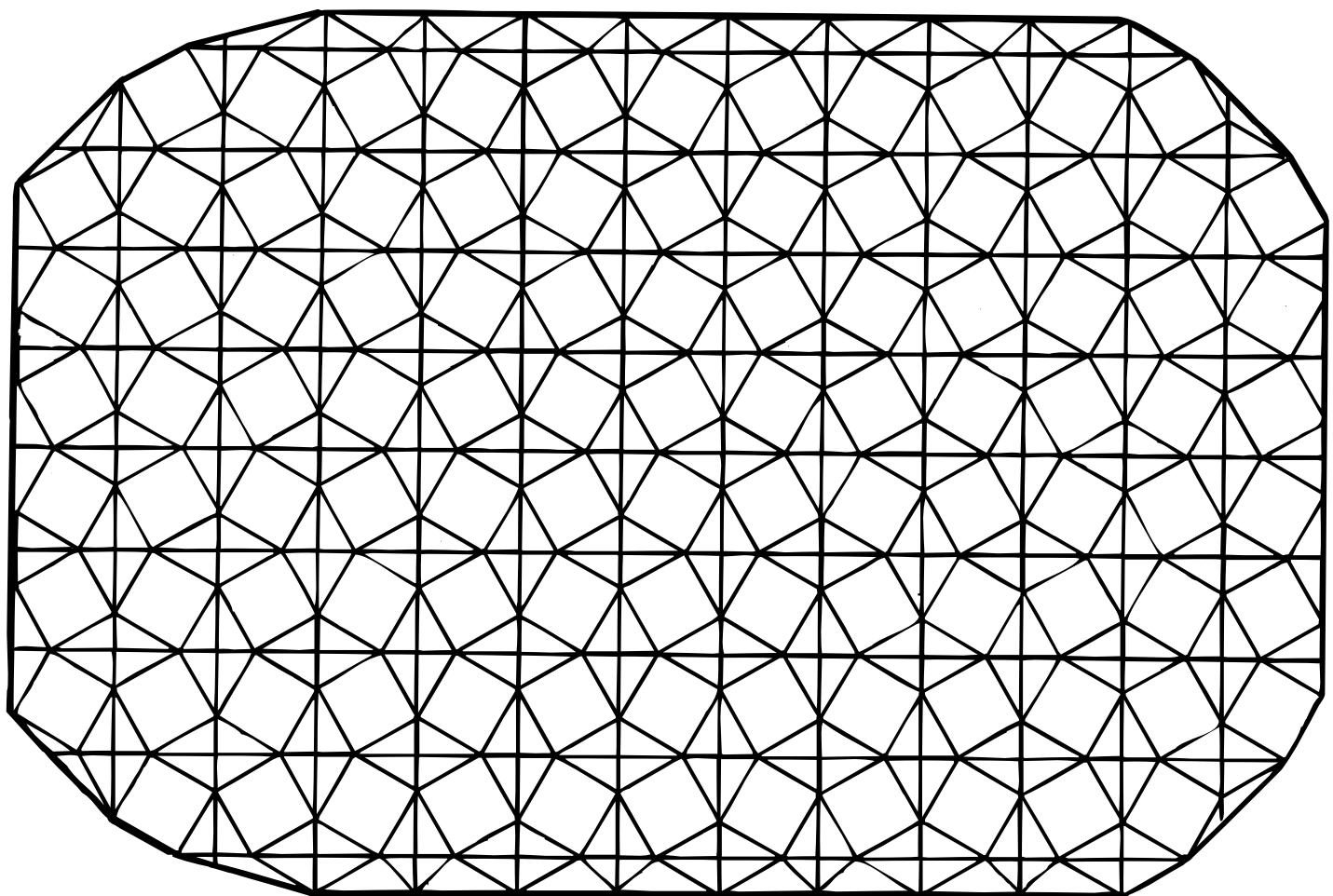
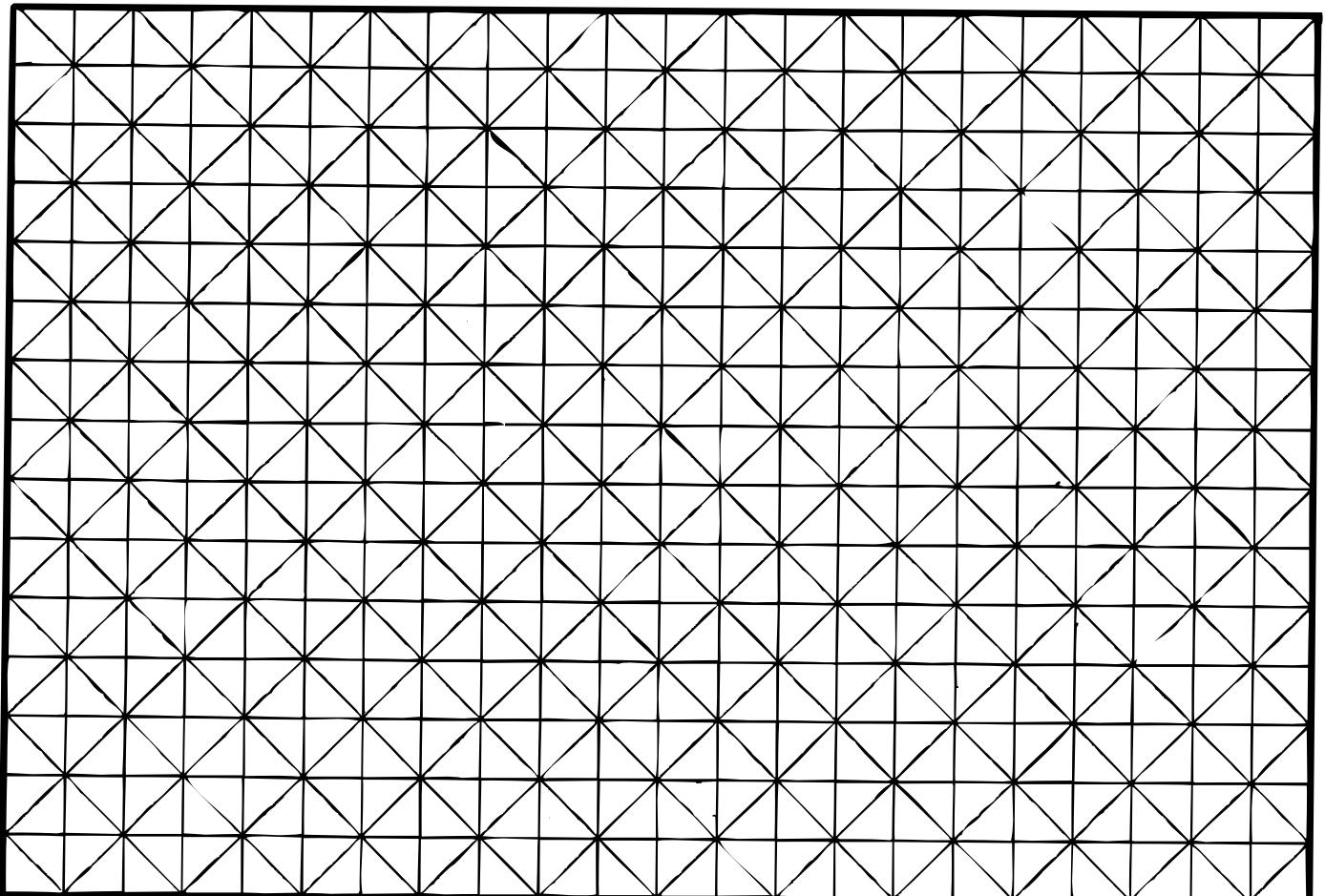




DESIGN A TESSELLATION FOR EACH !



# TESSELLATIONS - THE FINAL DESIGNS!



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{rcl} 23 + 22 = & \underline{\hspace{2cm}} \\ 24 - 18 = & \underline{\hspace{2cm}} \\ 21 \times 6 = & \underline{\hspace{2cm}} \\ 25 \div 5 = & \underline{\hspace{2cm}} \\ 24 + 21 = & \underline{\hspace{2cm}} \\ 26 - 23 = & \underline{\hspace{2cm}} \\ 20 \times 9 = & \underline{\hspace{2cm}} \\ 21 \div 7 = & \underline{\hspace{2cm}} \\ 26 - 15 = & \underline{\hspace{2cm}} \\ 36 - 27 = & \underline{\hspace{2cm}} \end{array}$$

## DANDY DECIMALS

$$\begin{array}{rcl} 1.5 + 1.4 = & \underline{\hspace{2cm}} \\ 1.7 + 1.1 = & \underline{\hspace{2cm}} \\ 2.8 - 1.5 = & \underline{\hspace{2cm}} \\ 3.9 - 3.1 = & \underline{\hspace{2cm}} \\ 2 - 0.6 = & \underline{\hspace{2cm}} \\ 4 - 0.7 = & \underline{\hspace{2cm}} \\ 10 \times 2.5 = & \underline{\hspace{2cm}} \\ 10 \times 0.03 = & \underline{\hspace{2cm}} \\ 20\% \text{ AS A DECIMAL IS } & \underline{\hspace{2cm}} \\ 37\% \text{ AS A DECIMAL IS } & \underline{\hspace{2cm}} \end{array}$$

## RADICAL ROMANS

$X =$	<u>      </u>
$XX =$	<u>      </u>
$L =$	<u>      </u>
$LXX =$	<u>      </u>
$C =$	<u>      </u>
<u>      </u> = 30	<u>      </u>
<u>      </u> = 60	<u>      </u>
<u>      </u> = 80	<u>      </u>
<u>      </u> = 101	<u>      </u>
<u>      </u> = 110	<u>      </u>



## EXTRA EXAMPLES

$$\begin{array}{rcl} 589 + 300 = & \underline{\hspace{2cm}} \\ 600 + 600 = & \underline{\hspace{2cm}} \\ 500 - 170 = & \underline{\hspace{2cm}} \\ 600 - 128 = & \underline{\hspace{2cm}} \\ 90 \times 5 = & \underline{\hspace{2cm}} \\ 52 \times 10 = & \underline{\hspace{2cm}} \\ 100 \div 10 = & \underline{\hspace{2cm}} \\ 2341 \div 100 = & \underline{\hspace{2cm}} \\ 666 + 777 = & \underline{\hspace{2cm}} \\ 985 - 589 = & \underline{\hspace{2cm}} \end{array}$$

## THE QUINTUS QUIZ

I LEFT HOME AT \_\_\_\_\_  
 IT TOOK \_\_\_\_\_ MINUTES TO  
 GET TO SCHOOL. SCHOOL WENT  
 FOR \_\_\_\_\_ HOURS. SUPPER  
 WAS AT \_\_\_\_\_ TODAY. I WAS  
 OUT OF BED FOR \_\_\_\_\_ HOURS.

-THURSDAY-

OUT OF BED	7.30 a.m.
LEFT HOME	8.15
GOT TO SCHOOL	8.45
SCHOOL FINISHED	3.25
ARRIVED HOME	5.00
SUPPERTIME	9.40
INTO MY BED	10.30

NUMBER OF MISTAKES \_\_\_\_\_

# NUMBER RELATIONS

FOR EACH OF THE SERIES BELOW, FILL IN THE MISSING NUMBERS!

2	4	6	8	10	—	—	—	—	—
3	5	7	9	11	—	—	—	—	—
4	8	12	16	20	—	—	—	—	—
1	5	2	5	3	5	—	—	—	—
30	27	24	21	18	—	—	—	—	—
1	4	9	16	25	—	—	—	—	—
2	3	5	8	12	—	—	—	—	—
1	2	4	8	16	—	—	—	—	—
4	5	9	14	—	—	60	—	—	—
1	2	3	5	—	—	21	—	—	—
5	15	30	50	—	—	140	—	—	—
22	24	28	36	—	—	148	—	—	—



NOW CROSS OUT  
ALL THE SQUARES  
WHERE THE  
NUMBERS ARE  
NOT IN YOUR  
ANSWERS.



Y	K	O	U	E	J	O
14	79	15	24	43	73	87
F	C	L	A	N	S	I
10	36	39	24	28	11	46
A	L	W	C	A	Y	S
4	52	81	400	23	84	75
C	G	O	H	V	N	T
36	700	15	70	105	28	17
O	B	R	N	N	Q	A
36	29	3	18	2	33	49
A	P	C	A	L	M	C
76	230	23	37	8	25	84
U	L	A	T	O	R	B
24	64	12	32	15	23	200

# WHAT IS THE BEST THING TO DO IF YOUR SHIP STARTS TO SINK?

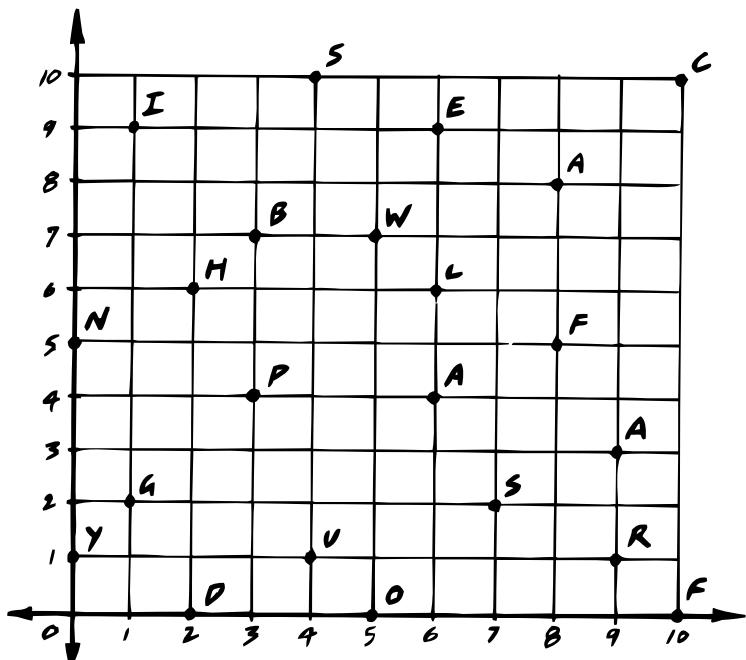
TO FIND THE ANSWER,  
WRITE THE CORRECT LETTER  
ABOVE EACH CO-ORDINATE PAIR!

$(\overline{1}, \overline{2})$   $(\overline{9}, \overline{1})$   $(\overline{6}, \overline{4})$   $(\overline{3}, \overline{7})$   $(\overline{8}, \overline{8})$

$(\overline{3}, \overline{4})$   $(\overline{1}, \overline{9})$   $(\overline{6}, \overline{9})$   $(\overline{10}, \overline{10})$   $(\overline{6}, \overline{9})$   $(\overline{5}, \overline{0})$   $(\overline{8}, \overline{5})$

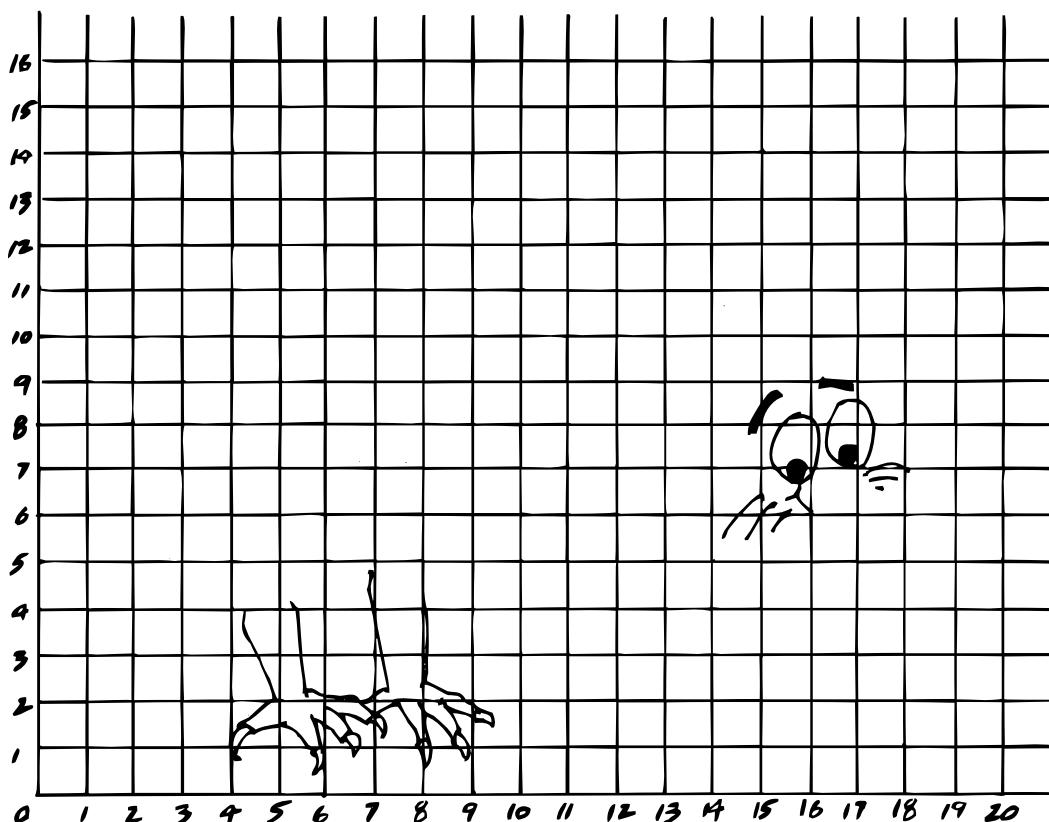
$(\overline{7}, \overline{2})$   $(\overline{5}, \overline{0})$   $(\overline{6}, \overline{4})$   $(\overline{3}, \overline{4})$   $(\overline{8}, \overline{8})$   $(\overline{0}, \overline{5})$   $(\overline{2}, \overline{0})$   $(\overline{5}, \overline{7})$   $(\overline{9}, \overline{3})$   $(\overline{4}, \overline{10})$   $(\overline{2}, \overline{6})$

$(\overline{0}, \overline{1})$   $(\overline{5}, \overline{0})$   $(\overline{4}, \overline{1})$   $(\overline{9}, \overline{1})$   $(\overline{7}, \overline{2})$   $(\overline{6}, \overline{9})$   $(\overline{6}, \overline{6})$   $(\overline{10}, \overline{0})$   $(\overline{9}, \overline{3})$   $(\overline{7}, \overline{2})$   $(\overline{2}, \overline{6})$   $(\overline{5}, \overline{0})$   $(\overline{9}, \overline{1})$   $(\overline{6}, \overline{9})$  !

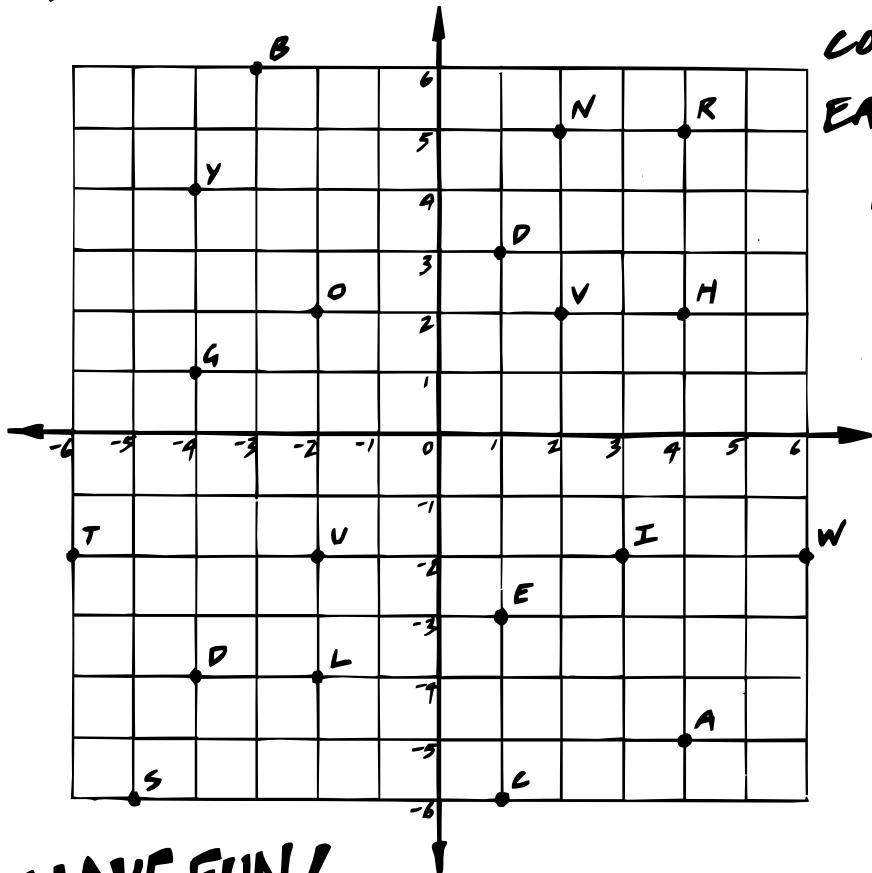


NOW PLOT THESE POINTS ON THE GRAPH BELOW AND JOIN THEM AS YOU GO!

$(7, 5)$   $(8, 4)$   $(14, 6)$   $(16, 6)$   $(17, 5)$   $(19, 2)$   $(20, 1)$   $(19, 3)$   
 $(18, 5)$   $(17, 7)$   $(18, 9)$   $(16, 10)$   $(12, 13)$   $(9, 14)$   $(4, 15)$   $(2, 13)$   
 $(0, 10)$   $(2, 7)$   $(4, 4)$   $(7, 5)$



**ANOTHER CANNIBAL CODE! TO DECODE WRITE THE  
CORRECT LETTER ABOVE  
EACH CO-ORDINATE PAIR!**



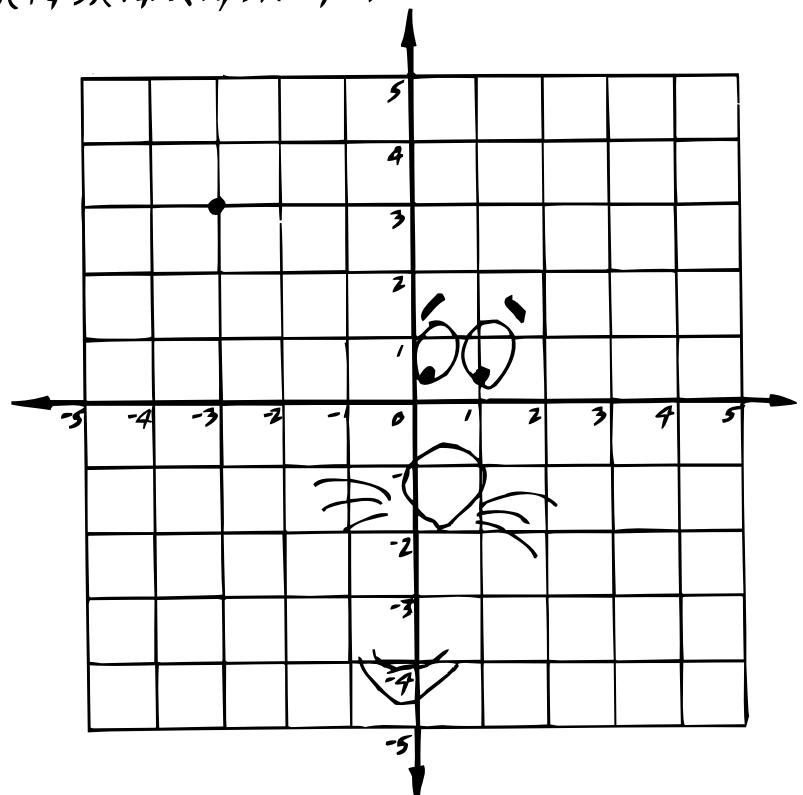
**HAVE FUN!**

"  
 $(1, 3)(3, -2)(-4, -1)$   
 $(-4, 4)(-2, 2)(-2, -2)$   
 $(4, 2)(1, -3)(4, -5)(4, 5)$   
 $(4, -5)(-3, 6)(2, 2)(-2, -2)(-6, 2)$   
 $(-6, -2)(4, 2)(1, -3)$   
 $(2, 2)(1, -3)(-4, 1)(1, -3)$

$(1, -6)(4, -5)(2, 5)(3, -2)(-3, 6)(4, -5)(-2, -4)$      $(6, -2)(4, 2)(-2, 2)$      $(-2, 2)(2, 5)(-2, -4)(-4, 4)$   
 $(4, -5)(-6, -2)(1, -3)$      $(-5, -6)(6, -2)(1, -3)(1, 3)(1, -3)(-5, -6)$  !"

**NOW PLOT THESE POINTS  
AND JOIN THEM AS YOU GO!  
COLOUR YOUR RESULT.**

$(2, 2)(3, 0)(3, -2)(2, -4)(1, -4)$   
 $(0, -3)(-1, -4)(-2, -4)(-3, -3)(-3, -1)$   
 $(-1, 1)(-2, 2)(-4, 1)(-5, 3)(-3, 5)$   
 $(0, 4)(1, 3)(3, 5)(5, 3)(5, 1)$   
 $(4, 0)(2, 2)(0, 2)(-2, 3)(-3, 3)$



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{rcl} 25 + 16 = & \underline{\hspace{2cm}} \\ 25 - 16 = & \underline{\hspace{2cm}} \\ 20 \times 7 = & \underline{\hspace{2cm}} \\ 36 \div 9 = & \underline{\hspace{2cm}} \\ 27 + 28 = & \underline{\hspace{2cm}} \\ 30 - 14 = & \underline{\hspace{2cm}} \\ 24 \times 5 = & \underline{\hspace{2cm}} \\ 27 \div 3 = & \underline{\hspace{2cm}} \\ 28 + 12 = & \underline{\hspace{2cm}} \\ 33 - 26 = & \underline{\hspace{2cm}} \end{array}$$

## MONEY MIXTURES

$$\begin{array}{rcl} 20c + 10c = & \underline{\hspace{2cm}} \\ 40c + 20c = & \underline{\hspace{2cm}} \\ 25c - 15c = & \underline{\hspace{2cm}} \\ 50c - 50c = & \underline{\hspace{2cm}} \\ 6 \times 50c = & \underline{\hspace{2cm}} \\ 8 \times 40c = & \underline{\hspace{2cm}} \\ \$7 + \$9 = & \underline{\hspace{2cm}} \\ \$9 - \$7 = & \underline{\hspace{2cm}} \\ \$50 \times 3 = & \underline{\hspace{2cm}} \\ \$30 \div 6 = & \underline{\hspace{2cm}} \end{array}$$

## VISCOUS VARIABLES

$$\begin{array}{rcl} k + k = & \underline{\hspace{2cm}} \\ 2l - l = & \underline{\hspace{2cm}} \\ m + 3m = & \underline{\hspace{2cm}} \\ 2n + 4n = & \underline{\hspace{2cm}} \\ 5p + 3p = & \underline{\hspace{2cm}} \\ q - q = & \underline{\hspace{2cm}} \\ 3r + 2r = & \underline{\hspace{2cm}} \\ 3s - 2s = & \underline{\hspace{2cm}} \\ 5t + 4t = & \underline{\hspace{2cm}} \\ 5t - 4t = & \underline{\hspace{2cm}} \end{array}$$

## EXTRA EXAMPLES

$$\begin{array}{rcl} 145 + 200 = & \underline{\hspace{2cm}} \\ 400 + 300 = & \underline{\hspace{2cm}} \\ 200 - 130 = & \underline{\hspace{2cm}} \\ 100 - 48 = & \underline{\hspace{2cm}} \\ 90 \times 5 = & \underline{\hspace{2cm}} \\ 80 \times 6 = & \underline{\hspace{2cm}} \\ 20 \div 10 = & \underline{\hspace{2cm}} \\ 60 \div 12 = & \underline{\hspace{2cm}} \\ 444 + 444 = & \underline{\hspace{2cm}} \\ 841 - 241 = & \underline{\hspace{2cm}} \end{array}$$

## THE QUINTUS QUIZ

- HOW MANY DAYS IN AUGUST? \_\_\_\_\_
- WHAT DAY IS SEPTEMBER 15th? \_\_\_\_\_
- WHAT DATE IS THE THIRD SUNDAY OF AUGUST? \_\_\_\_\_
- WHAT DATE IS THE FIRST MONDAY OF SEPTEMBER? \_\_\_\_\_
- HOW MANY WEDNESDAYS IN AUGUST? \_\_\_\_\_

AUGUST						
M	T	W	T	F	S	S
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

SEPTEMBER						
M	T	W	T	F	S	S
30					1	
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						30



NUMBER OF MISTAKES \_\_\_\_\_

# - MEET CARLA OUR CRAZY CALCULATOR!



CARLA IS SO CLEVER!  
EVERYTIME YOU GIVE HER  
A NUMBER, ANOTHER  
ONE POPS OUT!

TRY AND GUESS WHAT  
CARLA IS DOING AND  
FILL IN THE GAPS

NUMBERS IN	2	3	4	5	6	7	8	9	10	—	—
OUT	8	9	—	—	—	13	—	—	—	21	30

- THE RULE IS \_\_\_\_\_

HERE'S WHAT CRAZY CARLA DID TO SOME OTHER NUMBERS.  
TRY AND WORK OUT WHAT SHE'S UP TOO!

IN	0	1	2	3	4	10	20	—	—
OUT	0	5	10	—	—	—	—	150	500

- THE RULE IS \_\_\_\_\_

IN	0	1	2	3	4	8	10	20	—	—
OUT	0	$\frac{1}{2}$	1	—	—	—	—	—	100	500

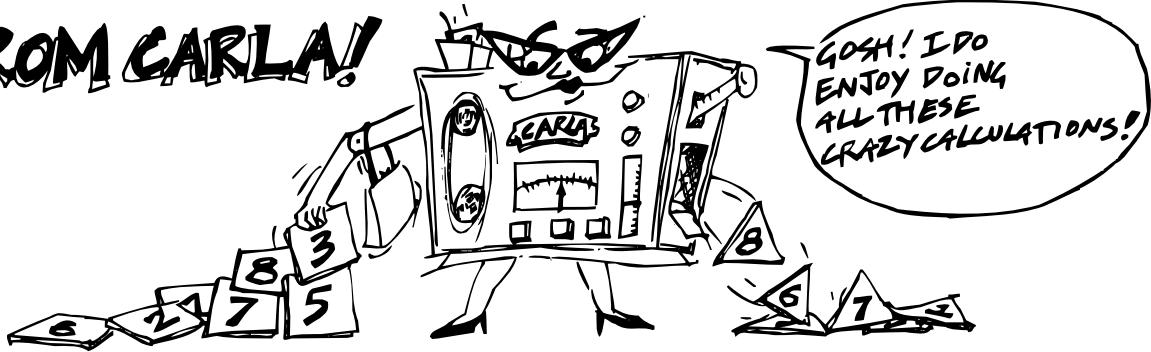
THE RULE IS \_\_\_\_\_

IN	0	1	2	3	4	—	—	10	100	1000
OUT	1	3	5	—	—	11	13	—	—	—

THE RULE IS \_\_\_\_\_

# MORE FROM CARLA!

COMPLETE  
THE CHARTS  
BELOW!



**IN** → **OUT**

0	0
1	3
2	6
3	
4	
5	
6	
7	
8	
	99

CARLA'S RULE

**IN** → **OUT**

0	4
1	5
2	
3	
4	
5	
6	
7	
8	
9	

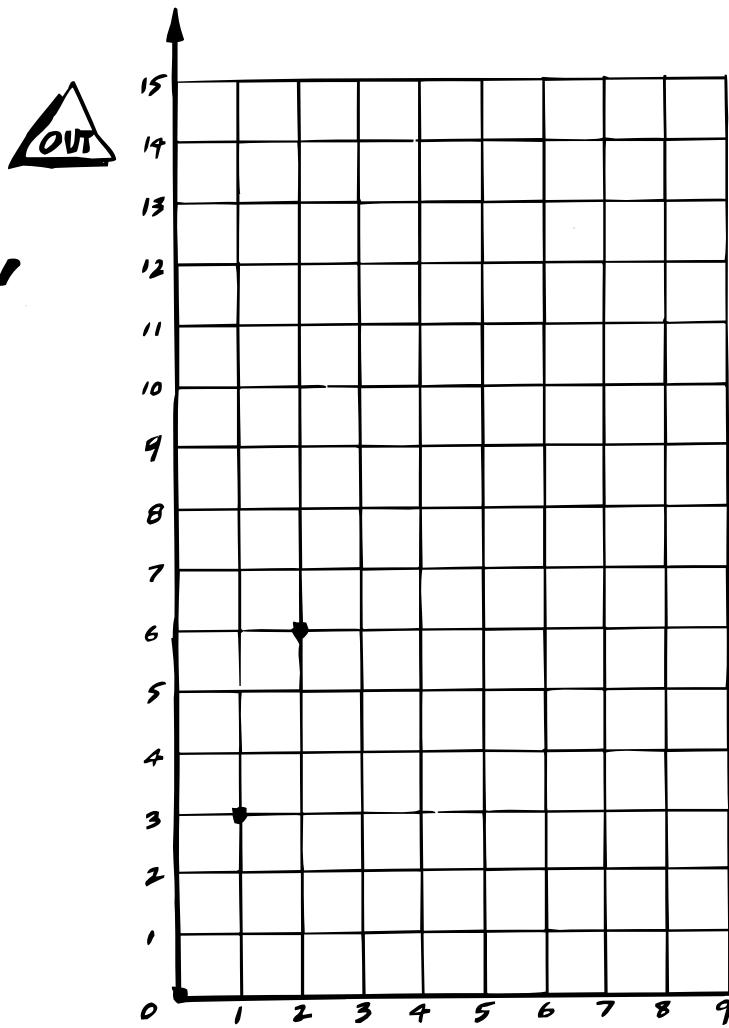
CARLA'S RULE

**IN** → **OUT**

0	2
1	5
2	8
3	
4	
5	
6	
7	
8	
9	

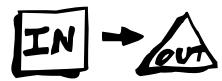
CARLA'S RULE

NOW USING THE  
GRAPH TRY AND  
PLOT AS MANY  
POINTS AS YOU CAN  
FROM EACH CHART!  
MAKE THE RESULTS  
FROM EACH CHART  
A DIFFERENT  
COLOUR.  
(THE FIRST FEW HAVE  
BEEN DONE FOR YOU.)



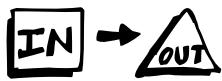
# CARLA'S FINAL CALCULATIONS

COMPLETE THE CHARTS.  
THEN USE YOUR RESULTS TO DRAW A GRAPH OF EACH CHART.  
(USE A DIFFERENT COLOUR FOR EACH ONE.)



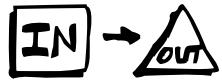
-3	0
-2	1
-1	
0	
1	
2	5
3	
4	

CARLA'S RULE



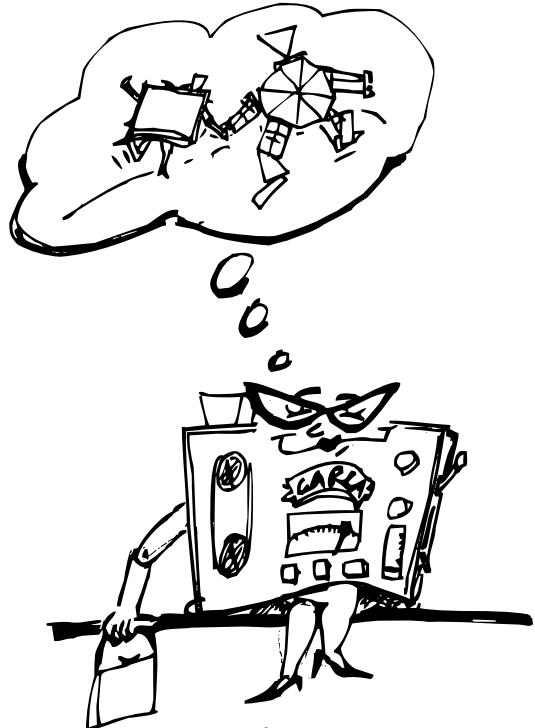
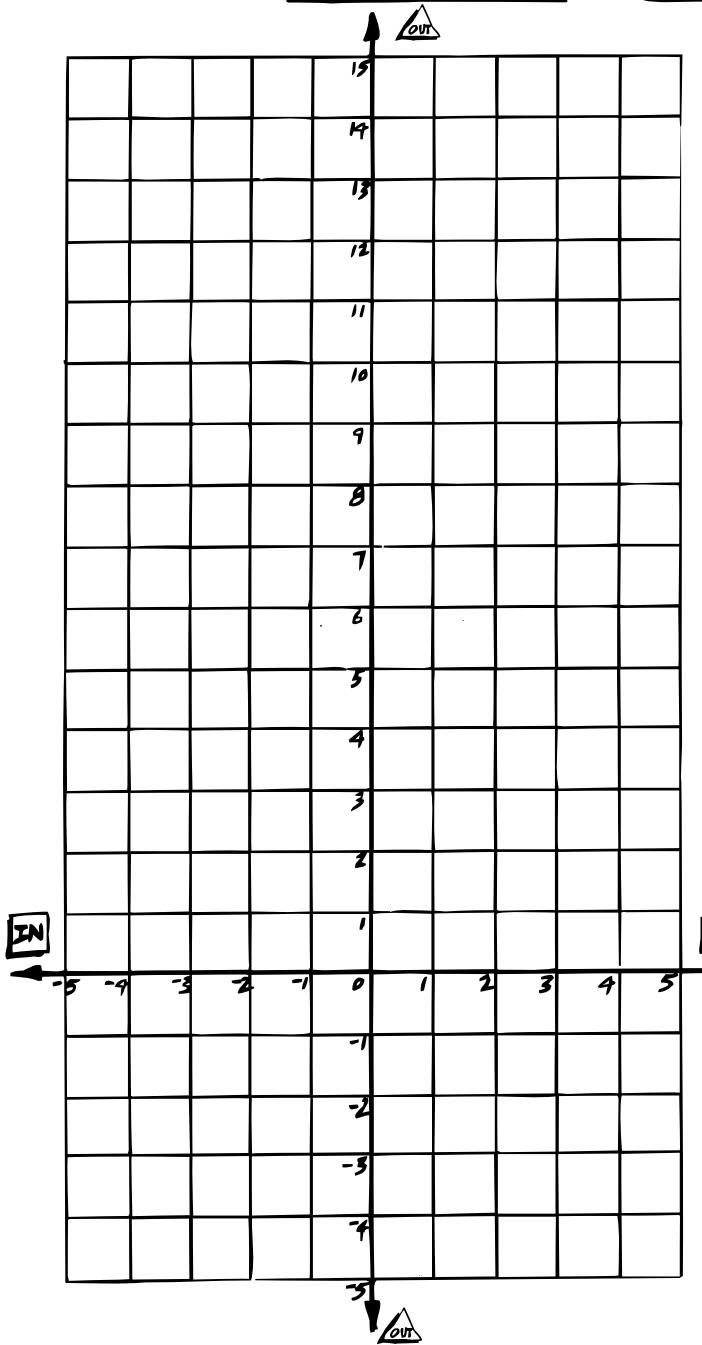
-3	-12
-2	
-1	
0	
1	4
2	
3	
4	16

CARLA'S RULE



-3	
-2	-4
-1	
0	
1	-1
2	
3	
4	

CARLA'S RULE



AND WHEN CARLA CALCULATES FINISHED FOR THE DAY SHE LIKES TO SIT BACK AND DREAM OF HER SWEETHEART, FRACTION MAN, AND ALL THE PROBLEMS THEY WILL ONE DAY SOLVE TOGETHER!

# WHIZZ-KIDS WORKSHEET



**22**

## NIFTY NUMBERS

$21 + 13 = \underline{\hspace{2cm}}$

$21 - 13 = \underline{\hspace{2cm}}$

$20 \times 5 = \underline{\hspace{2cm}}$

$28 \div 4 = \underline{\hspace{2cm}}$

$29 + 27 = \underline{\hspace{2cm}}$

$22 - 15 = \underline{\hspace{2cm}}$

$24 \times 3 = \underline{\hspace{2cm}}$

$24 \div 3 = \underline{\hspace{2cm}}$

$23 - 21 = \underline{\hspace{2cm}}$

$34 - 25 = \underline{\hspace{2cm}}$

## TRENDY TABLES

$8 \times 2 = \underline{\hspace{2cm}}$

$8 \times 3 = \underline{\hspace{2cm}}$

$8 \times 4 = \underline{\hspace{2cm}}$

$8 \times 5 = \underline{\hspace{2cm}}$

$8 \times \underline{\hspace{1cm}} = 56$

$8 \times \underline{\hspace{1cm}} = 64$

$8 \times \underline{\hspace{1cm}} = 72$

$8 \times 10 = \underline{\hspace{2cm}}$

$8 \times 12 = \underline{\hspace{2cm}}$

$8 \times \underline{\hspace{1cm}} = 160$

## SOFT SUBSTITUTES

$k = 13, k + 5 = \underline{\hspace{2cm}}$

$l = 18, l + 12 = \underline{\hspace{2cm}}$

$m = 19, m - 10 = \underline{\hspace{2cm}}$

$n = 17, n - 3 = \underline{\hspace{2cm}}$

$p = 11, 4 + p = \underline{\hspace{2cm}}$

$r = 16, 20 - r = \underline{\hspace{2cm}}$

$s = 12, 10s = \underline{\hspace{2cm}}$

$t = 15, 4t = \underline{\hspace{2cm}}$

$u = 10, 9u = \underline{\hspace{2cm}}$

$v = 20, 11v = \underline{\hspace{2cm}}$

## EXTRA EXAMPLES

$35 \text{ ADDED TO } 47 \text{ IS } \underline{\hspace{2cm}}$

$25 \text{ TIMES } 20 \text{ IS } \underline{\hspace{2cm}}$

$\$15.26 + \$11.35 = \underline{\hspace{2cm}}$

$\$18.75 + \$16.50 = \underline{\hspace{2cm}}$

$919 = 900 + \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

$700 + 30 + 8 = \underline{\hspace{2cm}}$

$666 + 440 = \underline{\hspace{2cm}}$

$1111 + 2222 = \underline{\hspace{2cm}}$

$540 - 380 = \underline{\hspace{2cm}}$

$963 - 526 = \underline{\hspace{2cm}}$

## THE QUINTUS QUIZ

-FIND THE COST FOR ...

3 ADULTS ONLY                 

2 ADULTS & 1 CHILD                 

2 ADULTS & 3 CHILDREN                 

1 ADULT & 2 CHILDREN                 

4 ADULTS & 5 CHILDREN                 

-HEALTH EXPO-  
ADULTS \$3  
CHILDREN \$2

NUMBER OF MISTAKES

# "INFORMATION PLEASE!"

TIME TO TAKE A SURVEY IN YOUR CLASS!

- CHOOSE AT LEAST 10 PEOPLE.

- USE THE RESULTS SHEET ON THE NEXT PAGE TO RECORD YOUR FINDINGS!

## MY SURVEY ON CLASS \_\_\_\_\_

THE SURVEY RESULTS WILL BE COMPLETELY CONFIDENTIAL. PLEASE ANSWER ALL THE QUESTIONS HONESTLY!

THANK YOU. SIGNED \_\_\_\_\_

### PERSONAL

- EYE COLOUR \_\_\_\_\_
- AGE \_\_\_\_\_
- BIRTHDAY MONTH \_\_\_\_\_
- CAR COLOUR \_\_\_\_\_
- HAIR COLOUR \_\_\_\_\_
- NUMBER OF CHILDREN IN FAMILY \_\_\_\_\_
- METHOD OF GETTING TO SCHOOL \_\_\_\_\_

### FAVOURITES

- FAVOURITE SCHOOL SUBJECT \_\_\_\_\_
- FAVOURITE TEACHER \_\_\_\_\_
- FAVOURITE T.V. PROGRAMME \_\_\_\_\_
- FAVOURITE POP GROUP \_\_\_\_\_
- FAVOURITE SPORT \_\_\_\_\_
- FAVOURITE DAY OF THE WEEK \_\_\_\_\_

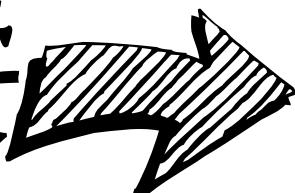


# - RESULTS PAGE

=PUT TALLY MARKS (|||||) IN EACH BOX  
THEN ADD UP YOUR RESULTS!

EYE COLOUR	BLUE		GREEN			BROWN			OTHER			
HAIR COLOUR	BLACK		BROWN			RED		BLOND		OTHER		
BIRTHDAY MONTH	J	F	M	A	M	J	J	A	S	O	N	D
CAR COLOUR	—			—			—			—		
AGE	12		13			14		15		16		
NUMBER OF CHILDREN IN FAMILY	1	2		3		4		5		≥6		
METHOD OF GETTING TO SCHOOL	WALK		BIKE		CAR		BUS		TAXI		OTHER	
FAVOURITE SUBJECT	—	—	—	—	—	—	—	—	—	—	—	—
FAVOURITE TEACHER	—	—	—	—	—	—	—	—	—	—	—	—
FAVOURITE T.V. PROGRAMME	—	—	—	—	—	—	—	—	—	—	—	—
FAVOURITE POP GROUP	—	—	—	—	—	—	—	—	—	—	—	—
FAVOURITE SPORT	—	—	—	—	—	—	—	—	—	—	—	—
FAVOURITE DAY OF WEEK	MON	TUES	WED	THURS	FRI	SAT	SUN					

NOW GRAPH YOUR DATA ON THE NEXT PAGE!

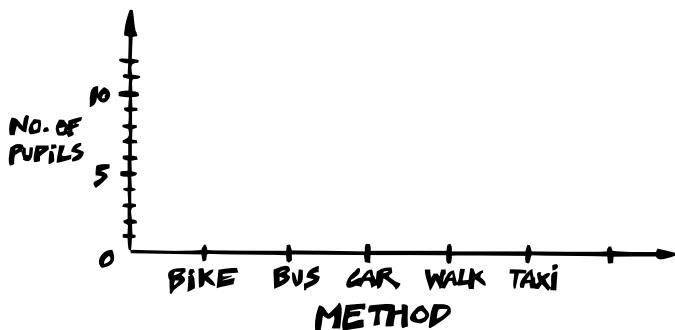


**- COMPLETE THESE  
GRAPHS BASED  
ON YOUR SURVEY  
RESULTS!**

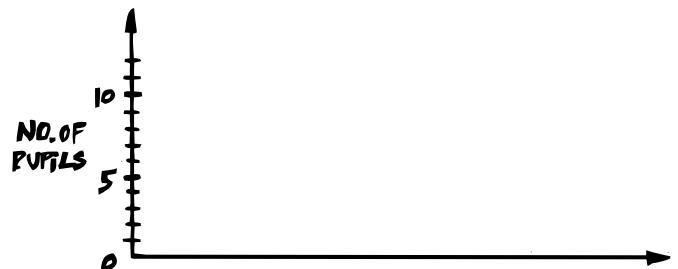
**1 EYE COLOUR**



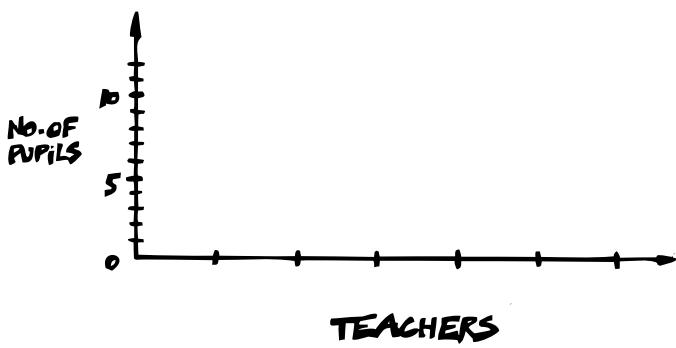
**2 METHOD OF  
GETTING TO SCHOOL**



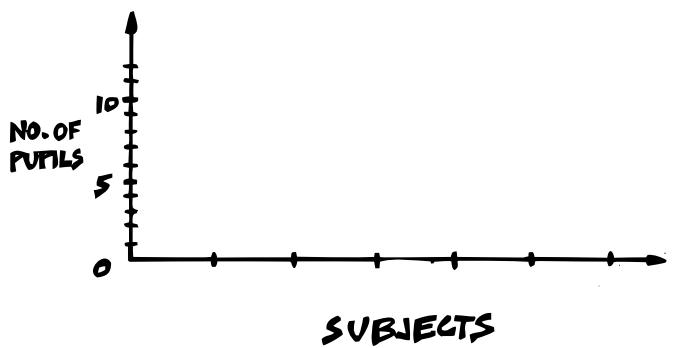
**3 CHOOSE ONE OTHER  
PERSONAL ITEM TO GRAPH**



**4 FAVORITE TEACHERS**



**5 FAVOURITE SUBJECTS**



**6 CHOOSE ONE OTHER  
FAVOURITE ITEM TO GRAPH**

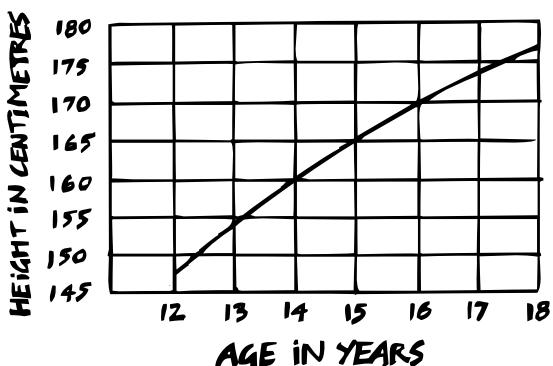


**- NOW EPI RECKONS SURVEYS  
ARE FUN, AND UNDERSTANDS  
HOW IMPORTANT THEY ARE IN  
FINDING INFORMATION, BUT  
TRY TO BE MORE  
ORGANISED THAN  
EPI IN YOUR  
SURVEY!**



# = GRAPHS GRAPHS GRAPHS!

## JODY'S HEIGHT FROM AGES 12-18



**5** ESTIMATE HER HEIGHT AT AGE 20 \_\_\_\_\_

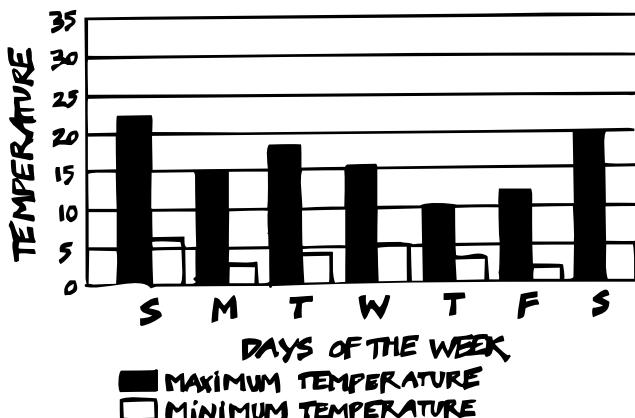
DRAW A LINE GRAPH TO SHOW THIS INFORMATION FOR PUTARURU.

TEMPERATURE	0°	4°	8°	10°	8°	8°	6°
TIME OF DAY	6 AM	8 AM	10 AM	12 NOON	2 PM	4 PM	6 PM



- = AT WHAT TIME WAS THE HIGHEST TEMPERATURE RECORDED? \_\_\_\_\_
- = AT WHAT TIMES OF THE DAY WAS THE TEMPERATURE 8°? \_\_\_\_\_
- = IN WHAT 2 HOURLY PERIOD DID THE GREATEST RISE OCCUR? \_\_\_\_\_
- = WHAT WAS THE TEMPERATURE AT 11 AM? \_\_\_\_\_

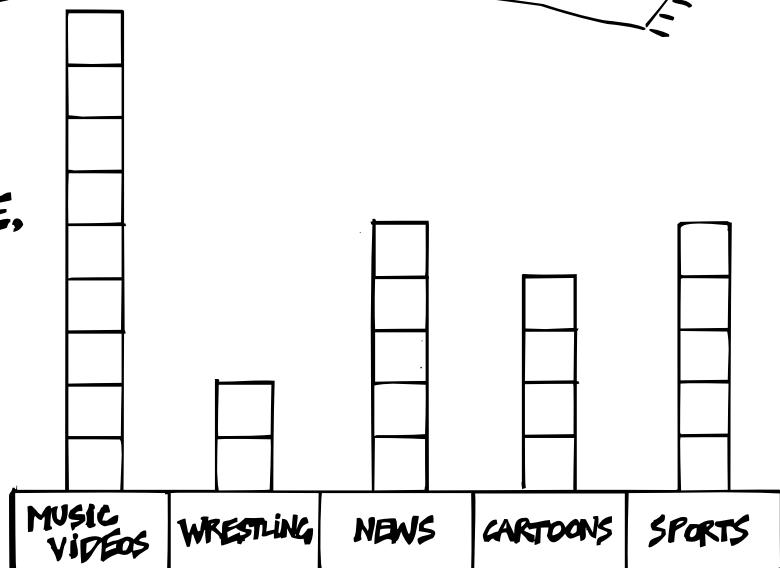
## MAXIMUM AND MINIMUM TEMPERATURE READINGS.



- 1** WHAT INFORMATION IS ON THE VERTICAL AXIS? \_\_\_\_\_
- 2** WHAT INFORMATION IS ON THE HORIZONTAL AXIS? \_\_\_\_\_
- 3** WHAT SCALE HAS BEEN USED ON THE VERTICAL AXIS? \_\_\_\_\_
- 4** WHAT DAY HAD THE HIGHEST TEMPERATURE? \_\_\_\_\_
- 5** WHAT WERE THE TEMPERATURES ON SATURDAY? \_\_\_\_\_

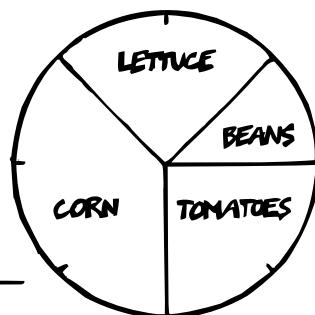
# FAVOURITE T.V. SHOWS

THE PUPILS OF I.N. STEIN COLLEGE EACH DREW A SQUARE ABOVE THEIR FAVOURITE T.V. PROGRAMME, TO MAKE THIS GRAPH!



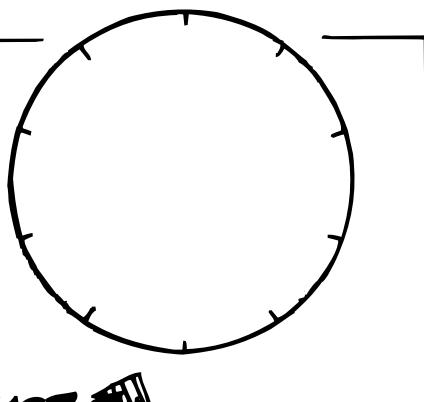
- WHICH PROGRAMME IS MOST POPULAR? \_\_\_\_\_
- WHICH PROGRAMMES HAVE EQUAL POPULARITY? \_\_\_\_\_
- HOW MANY PUPILS IN THE CLASS? \_\_\_\_\_
- WHAT TYPE OF GRAPH IS THIS CALLED? \_\_\_\_\_

A GARDENER HAS 40 HECTARES OF LAND PLANTED WITH VEGETABLES. A PIE CHART SHOWS HIS CROPS.



- WHAT IS  $\frac{1}{8}$  OF 40? \_\_\_\_\_
- HOW MANY HECTARES OF BEANS IS HE GROWING? \_\_\_\_\_
- HOW MANY HECTARES OF TOMATOES IS HE GROWING? \_\_\_\_\_
- HOW MANY HECTARES OF CORN IS HE GROWING? \_\_\_\_\_
- HOW MANY HECTARES OF CARROTS IS HE GROWING? \_\_\_\_\_

THE TOPP FAMILY INCOME IS SPENT AS FOLLOWS: 20% FOOD  
30% RENT  
15% CLOTHES  
20% BANKED  
15% OTHER



USE THESE FIGURES TO MAKE A PIE CHART

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$26 + 28 = \underline{\hspace{2cm}}$

$25 - 17 = \underline{\hspace{2cm}}$

$24 \times 10 = \underline{\hspace{2cm}}$

$27 \div 9 = \underline{\hspace{2cm}}$

$23 + 24 = \underline{\hspace{2cm}}$

$29 - 22 = \underline{\hspace{2cm}}$

$21 \times 12 = \underline{\hspace{2cm}}$

$22 \div 11 = \underline{\hspace{2cm}}$

$28 - 13 = \underline{\hspace{2cm}}$

$38 - 29 = \underline{\hspace{2cm}}$



## MIGHTY METRICS

$30\text{g} + 90\text{g} = \underline{\hspace{2cm}}$

$64\text{g} + 46\text{g} = \underline{\hspace{2cm}}$

$22\text{l} - 12\text{l} = \underline{\hspace{2cm}}$

$58\text{l} - 29\text{l} = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}}\text{m} = 1.2\text{ km}$

$\underline{\hspace{2cm}}\text{m} = 1.567\text{ km}$

$4000\text{ mg} = \underline{\hspace{2cm}}\text{g}$

$4200\text{ mg} = \underline{\hspace{2cm}}\text{g}$

$200\text{ cm} = \underline{\hspace{2cm}}\text{m}$

$234\text{ cm} = \underline{\hspace{2cm}}\text{m}$

## FANTASTIC FRACTIONS

$\frac{1}{3} \text{ OF } 3 = \underline{\hspace{2cm}}$

$\frac{1}{3} \text{ OF } 9 = \underline{\hspace{2cm}}$

$\frac{1}{3} \text{ OF } 21 = \underline{\hspace{2cm}}$

$\frac{1}{4} \text{ OF } 4 = \underline{\hspace{2cm}}$

$\frac{1}{4} \text{ OF } 12 = \underline{\hspace{2cm}}$

$\frac{1}{5} \times \frac{1}{5} = \underline{\hspace{2cm}}$

$\frac{1}{5} + \frac{1}{5} = \underline{\hspace{2cm}}$

$\frac{4}{11} \times \frac{4}{11} = \underline{\hspace{2cm}}$

$\frac{4}{9} + \frac{4}{9} = \underline{\hspace{2cm}}$

$\frac{5}{9} - \frac{5}{9} = \underline{\hspace{2cm}}$

## EXTRA EXAMPLES

$\underline{\hspace{2cm}} \text{ DAYS IN 1 YEAR}$

$24 \text{ HOURS} = \underline{\hspace{2cm}} \text{ DAY}$

$1.7 + 1.8 = \underline{\hspace{2cm}}$

$2.4 - 1.6 = \underline{\hspace{2cm}}$

$0.5 \times 3 = \underline{\hspace{2cm}}$

$1.5 \div 5 = \underline{\hspace{2cm}}$

$48, 24, \underline{\hspace{2cm}}, 6$

$1234 + 4321 = \underline{\hspace{2cm}}$

$777 - 555 = \underline{\hspace{2cm}}$

$10^2 = \underline{\hspace{2cm}}$

## THE QUINTUS QUIZ

-FIND THE COST OF...

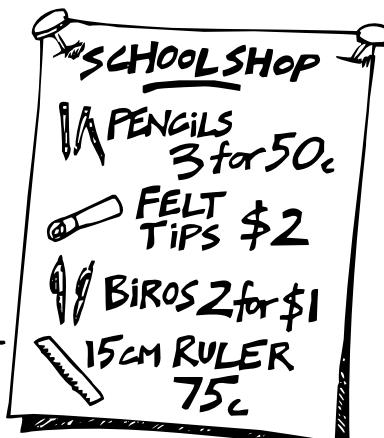
12 FELT TIPS \_\_\_\_\_

30 PENCILS \_\_\_\_\_

20 RULERS \_\_\_\_\_

10 BIROS \_\_\_\_\_

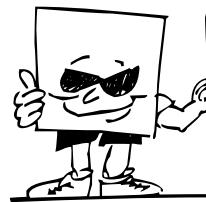
15 FELT TIPS & 10 BIROS \_\_\_\_\_



NUMBER OF MISTAKES \_\_\_\_\_

# -COMMON TABLES

- COMPLETE THIS TIMESTABLE!



<b>X</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>20</b>	<b>50</b>	<b>100</b>
<b>1</b>									
<b>2</b>									
<b>3</b>									
<b>4</b>									
<b>5</b>									
<b>6</b>									
<b>7</b>									
<b>8</b>									

TABLES COME IN ALL SORTS OF FORMS!  
DO YOU KNOW YOUR SCHOOL TIMETABLE?  
FILL IT IN BELOW!

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
1						
2						
3						
4						
5						
6						

CAN YOU THINK OF ANY OTHER TABLES YOU COME ACROSS EVERYDAY?

1

2

3

# LET'S GO ROLLER SKATING WITH... DIVINE DIANNE THE DIVIDING DOORMOUSE!



- NOW DIANNE THOUGHT SKATING  
WOULD BE LIKE DIVISION - EASY!

## THE TIMETABLE AT Di'S LOCAL RINK



DAY	SESSION TIMES	AGE	ADULT COST	JUNIOR COST	SKATE HIRE
MONDAY-THURSDAY	6PM-9PM	ANY AGE	\$7.00	\$4.00	\$1.00
FRIDAY AFTERNOON	4PM-6PM	UNDER 15		\$3.00	\$1.00
FRIDAY EVENING	7.15PM-9PM	ANY AGE	\$5.00	\$3.00	\$1.00
SATURDAY MORNING	9AM-12NOON	UNDER 15		\$3.00	\$1.00
SATURDAY AFTERNOON	1.30PM-5.15PM	ANY AGE	\$7.00	\$4.00	\$1.00

- WHICH DAYS HAVE SKATING UNTIL 9PM?

- WHEN IS SKATING FOR 'UNDER 15's' ONLY?

- WHICH SESSION IS THE LONGEST?

HOW LONG?

- Di WENT ON FRIDAY AFTERNOON AT 4.45 PM. SHE COULD SKATE FOR \_\_\_\_\_ MINUTES.

- Di WENT WITH 3 FRIENDS ALL AGED 13. THEY ALL HIRED SKATES. HOW MUCH DID IT COST IN TOTAL? \$\_\_\_\_\_

- MRS MATAI AND HER 2 CHILDREN WENT TO THE SATURDAY AFTERNOON SESSION. THEY OWN THEIR SKATES. HOW MUCH DID IT COST? \$\_\_\_\_\_

- WHICH SESSION GIVES THE BEST VALUE FOR MONEY?

DIANNE RECKONS SHE'LL STICK WITH DIVISION.  
IT LEAVES HER WITH WARM FUZZIES,  
NOT BRUISEY BUMPIES!

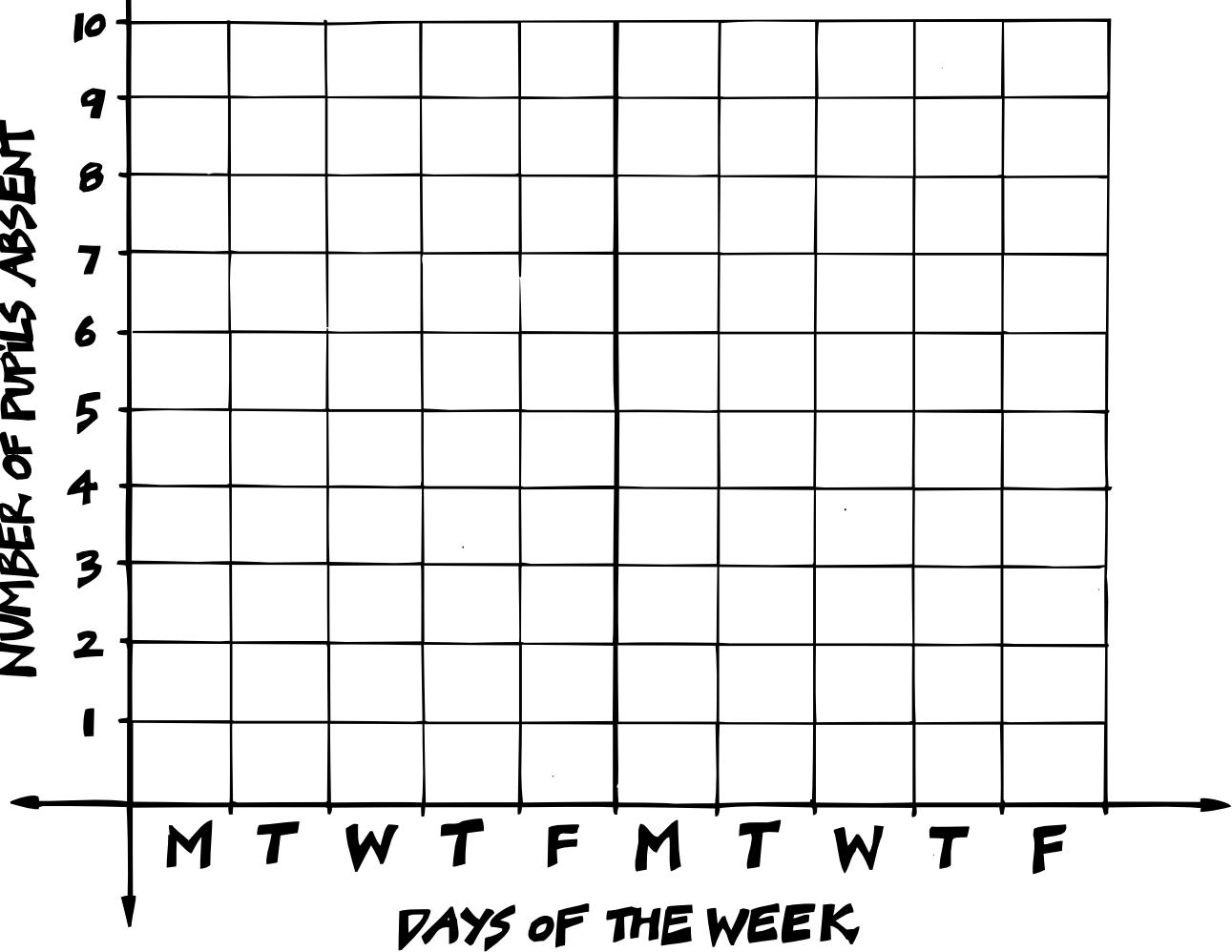
# THE REGISTER



- KEEP A RECORD OF HOW MANY STUDENTS ARE ABSENT IN YOUR CLASS EACH DAY!
- KEEP YOUR RECORD FOR 2 WEEKS AND RECORD YOUR RESULTS ON THE GRAPH BELOW!



NUMBER OF PUPILS ABSENT



- = WHAT DOES THE GRAPH SHOW? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- = ASK YOUR TEACHER TO SHOW YOU THE CLASS REGISTER. HOW IS IT RECORDED? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# -EPI'S EXCELLENT HOLIDAY TRAVEL GUIDE

THIS TABLE SHOWS YOU THE DISTANCES IN KILOMETRES BETWEEN SOME SOUTH ISLAND TOWNS!

	WESTPORT	TIMARU	QUEENSTOWN	NELSON	MOUNT COOK	MILFORD SOUND	INVERCARGILL	GREYMOUTH	DUNEDIN	CHRISTCHURCH	BLENHEIM	ALEXANDRA
ALEXANDRA	822	316	90	905	274	418	274	660	188	472	788	
BLENHEIM	266	486	822	117	655	1092	921	331	690	322		
CHRISTCHURCH	339	164	498	440	333	770	587	255	366			
DUNEDIN	705	202	294	808	339	403	222	559				
GREYMOUTH	104	355	605	295	503	911	780					
INVERCARGILL	936	424	194	1029	475	266						
MILFORD SOUND	1016	604	279	1211	594							
MOUNT COOK	599	212	286	788								
NELSON	231	603	939									
QUEENSTOWN	710	342										
TIMARU	502											
WESTPORT												



## = HOW FAR IS IT FROM ...

BLENHEIM TO CHRISTCHURCH \_\_\_\_\_ TIMARU TO WESTPORT \_\_\_\_\_

MT. COOK TO ALEXANDRA \_\_\_\_\_ ALEXANDRA TO NELSON \_\_\_\_\_

NELSON TO GREYMOUTH \_\_\_\_\_ GREYMOUTH TO BLENHEIM \_\_\_\_\_

= EPI AND POLLY GO ON A BUS TOUR FROM CHRISTCHURCH TO GREYMOUTH, ON TO ALEXANDRA AND TIMARU, THEN BACK TO CHRISTCHURCH. HOW FAR DID THEY TRAVEL? \_\_\_\_\_

= IS IT QUICKER TO TRAVEL FROM NELSON TO DUNEDIN VIA CHRISTCHURCH OR GREYMOUTH? \_\_\_\_\_

## = THE FINAL JOURNEYS!

WESTPORT IS 104 KM FROM \_\_\_\_\_

ALEXANDRA IS 418 KM FROM \_\_\_\_\_

CHRISTCHURCH IS 339 KM FROM \_\_\_\_\_

# EPIE'S AMAZING ALPHABET EXPERIMENT!

-YOU'LL NEED A PAGE OF WRITING FOR THIS EXPERIMENT.



FROM THE RESULTS OF THIS EXPERIMENT WE LEARN ABOUT HOW OFTEN DIFFERENT LETTERS ARE USED IN THE ENGLISH LANGUAGE!

TALLY HOW MANY TIMES EACH LETTER APPEARS AND ANSWER THE QUESTIONS BELOW!

	TALLY		TALLY
A		N	
B		O	
C		P	
D		Q	
E		R	
F		S	
G		T	
H		U	
I		V	
J		W	
K		X	
L		Y	
M		Z	

1 WHICH LETTER IS LEAST FREQUENT.

---

2 WHICH VOWEL IS MOST FREQUENT?

---

3 LIST THE 5 MOST USED LETTERS

---

WHAT DOES THE TALLY TABLE SHOW?

---



---

YOU COULD TRY THIS EXPERIMENT WITH ANOTHER LANGUAGE!  
REPEAT THE QUESTIONS!

- = WHICH LETTER IS LEAST FREQUENT? \_\_\_\_\_
  - = WHICH VOWEL IS MOST FREQUENT? \_\_\_\_\_
  - = LIST THE 5 MOST USED LETTERS \_\_\_\_\_
  - = WHAT DOES THE TALLY TABLE SHOW? \_\_\_\_\_
- 
-

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{ll} 11 + 19 = \underline{\hspace{2cm}} & 15 - 8 = \underline{\hspace{2cm}} \\ 20 - 15 = \underline{\hspace{2cm}} & 30 + 12 = \underline{\hspace{2cm}} \\ 3 \times 21 = \underline{\hspace{2cm}} & 28 \div 4 = \underline{\hspace{2cm}} \\ 56 + 12 = \underline{\hspace{2cm}} & 15 + 19 = \underline{\hspace{2cm}} \\ 74 - 36 = \underline{\hspace{2cm}} & 70 \div 5 = \underline{\hspace{2cm}} \\ 44 - 27 = \underline{\hspace{2cm}} & 2 \times 25 = \underline{\hspace{2cm}} \\ 2 \times 140 = \underline{\hspace{2cm}} & 100 \div 20 = \underline{\hspace{2cm}} \\ 150 \div 5 = \underline{\hspace{2cm}} & 100 - 80 = \underline{\hspace{2cm}} \\ 63 \div 3 = \underline{\hspace{2cm}} & 60 + 34 = \underline{\hspace{2cm}} \\ 109 + 5 = \underline{\hspace{2cm}} & 150 \times 2 = \underline{\hspace{2cm}} \end{array}$$

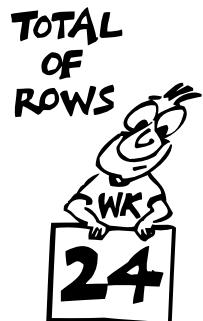
## TRENDY TABLES

$$\begin{array}{ll} 9 \times 4 = \underline{\hspace{2cm}} \\ 9 \times 7 = \underline{\hspace{2cm}} \\ 9 \times 11 = \underline{\hspace{2cm}} \\ 9 \times 9 = \underline{\hspace{2cm}} \\ 9 \times 5 = \underline{\hspace{2cm}} \\ 9 \times 8 = \underline{\hspace{2cm}} \\ 9 \times 12 = \underline{\hspace{2cm}} \\ 9 \times 6 = \underline{\hspace{2cm}} \\ 9 \times 3 = \underline{\hspace{2cm}} \\ 9 \times 13 = \underline{\hspace{2cm}} \end{array}$$

## SILLY SEQUENCES

COMPLETE THE SEQUENCES AND WORK OUT THE TOTALS OF EACH ROW & COLUMN!

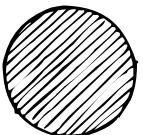
1	3	5	7	9	11	13	15	17	19	21	
1	4	7	10								
1	5	9	13								
1	6	11	16								
1	7	13	19								
1	8	15	22								

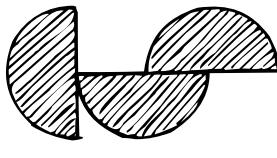
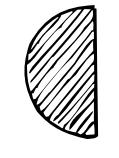


TOTAL OF EACH COLUMN

- WHAT IS THE PATTERN IN THE LAST COLUMN? \_\_\_\_\_
- WHAT IS THE PATTERN IN EACH ROW TOTAL? \_\_\_\_\_
- WHAT IS THE PATTERN IN EACH COLUMN TOTAL? \_\_\_\_\_

## RELATIVE RELATIONS

IF  = 20, FIND THE VALUE OF EACH OF THESE 



NUMBER OF MISTAKES \_\_\_\_\_



# GET INTO GEAR FOR SOME... ...RACEWAY MATHS!

<u>123</u>	<u>65</u>	<u>273</u>	<u>463</u>	<u>413</u>
<u>243</u>	<u>373</u>	<u>647</u>	<u>840</u>	<u>909</u>
<u>115</u>	<u>400</u>	<u>189</u>	<u>406</u>	<u>286</u>
—	—	—	—	—

<u>342</u>	<u>212</u>	<u>119</u>	<u>313</u>	<u>511</u>
<u>153</u>	<u>567</u>	<u>400</u>	<u>694</u>	<u>143</u>
<u>265</u>	<u>658</u>	<u>589</u>	<u>507</u>	<u>349</u>
<u>104</u>	<u>896</u>	<u>779</u>	<u>899</u>	<u>97</u>
—	—	—	—	—

<u>322</u>	<u>420</u>	<u>243</u>	<u>463</u>	<u>342</u>
<u>-115</u>	<u>-240</u>	<u>-144</u>	<u>-265</u>	<u>-258</u>
—	—	—	—	—

<u>524</u>	<u>637</u>	<u>505</u>	<u>705</u>	<u>243</u>
<u>-236</u>	<u>-548</u>	<u>-377</u>	<u>-248</u>	<u>-67</u>
—	—	—	—	—

<u>23</u>	<u>24</u>	<u>55</u>	<u>44</u>	<u>22</u>	<u>45</u>
<u>× 3</u>	<u>× 5</u>	<u>× 2</u>	<u>× 4</u>	<u>× 6</u>	<u>× 5</u>
—	—	—	—	—	—

<u>2</u> ) <u>158</u>	<u>3</u> ) <u>354</u>	<u>4</u> ) <u>620</u>	<u>5</u> ) <u>335</u>	<u>6</u> ) <u>4866</u>	<u>7</u> ) <u>6370</u>
<u>10</u> ) <u>9900</u>	<u>9</u> ) <u>8181</u>	<u>8</u> ) <u>8808</u>	<u>7</u> ) <u>3283</u>	<u>6</u> ) <u>76592</u>	

—DO-DA-CRAZY  
DECIMAL,  
SQUARES!

+	2·9	7·2	10·5
0·3			
0·8			
1·6			

×	0·2	0·9	1·2
6			
0·1			
0·5			

“SOMETIMES ACCURACY IS BETTER THAN SPEED!”  
DID YOU GET THE COURSE RECORD?

# -ARITHMETIC APTITUDE

-USE YOUR NUMBER SKILLS TO FILL IN  
EACH GAP TO COMPLETE THE EQUATIONS BELOW!

$$\begin{array}{lll} 12 + 6 = 15 + \underline{\quad} & (3 + 8) - 4 = \underline{\quad} & 13 + 8 = \underline{\quad} + 13 \\ 16 + 5 = 14 + \underline{\quad} & (7 + 9) + \underline{\quad} = 20 & 36 - \underline{\quad} = 20 + 16 \\ 15 + \underline{\quad} = 9 + 6 & (9 - 3) + \underline{\quad} = 15 & 9 + 9 = \underline{\quad} + 8 \\ 4 + \underline{\quad} = 18 + 6 & (12 + 3) - 8 = \underline{\quad} & 6 + 45 = 40 + \underline{\quad} \\ 8 + 9 = \underline{9} + 8 & (12 - 8) + 3 = \underline{\quad} & 16 + 0 = \underline{\quad} + 6 \end{array}$$

NOW WRITE  $\times$  OR  $\div$  IN EACH  $\triangle$  TO MAKE TRUE SENTENCES!

$$\begin{array}{lll} 6 \triangle 3 = 18 & 24 \triangle 2 = 48 & 8 \triangle 9 = 72 \\ 4 \triangle 9 = 36 & 70 \triangle 7 = 10 & 6 \triangle 6 = 1 \\ 18 \triangle 6 = 3 & 60 \triangle 10 = 600 & 36 \triangle 9 = 4 \\ 20 \triangle 5 = 100 & 50 \triangle 5 = 10 & 48 \triangle 2 = 96 \end{array}$$

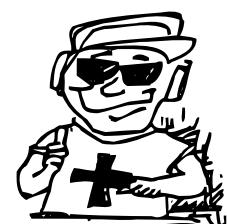
-COMPLETE THESE NUMBER SENTENCES

$$\begin{array}{lll} 100 - 10 = 9 \times \underline{\quad} & (4 \times 6) + \underline{\quad} = 30 \\ 16 + 4 = 10 + \underline{\quad} & 3 \times 2 \times \underline{\quad} = 30 & (3 \times 7) - 8 = \underline{\quad} \\ 3 \times 9 = 22 + \underline{\quad} & (12 \div 6) \div 2 = \underline{\quad} & (6 \times 6) + \underline{\quad} = 43 \\ 26 - 8 = \underline{\quad} + 8 & 12 \div (6 \div 2) = \underline{\quad} & (4 \times 8) + 9 = \underline{\quad} \\ 19 + 7 = 30 - \underline{\quad} & 8 \times (2 + 7) = \underline{\quad} & (7 \times 8) - \underline{\quad} = 49 \\ 48 \div 6 = \underline{\quad} + 3 & (8 \times 2) + 7 = \underline{\quad} & (6 \times \underline{\quad}) + 8 = 38 \\ 42 \div \underline{\quad} = 9 - 3 & 20 - \underline{\quad} = 8 \times 2 & (\underline{\quad} \times 9) - 5 = 40 \end{array}$$

... AND FINALLY

$\times$	5	10	15	20
7				
12				
20				

+	13	46	78	119
25				
52				
87				



HEY, WORK  
POSITIVELY!

# THE MAGICAL MIND READER

COPY THE FOLLOWING ONTO 6 CARDS. SHOW THEM TO A FRIEND. ASK THEM TO SELECT ONE NUMBER FROM ANY CARD. NOW GET THEM TO TELL YOU WHICH CARDS THEIR NUMBER APPEARS ON. ADD TOGETHER THE NUMBER ON THE TOP LEFT HAND CORNER OF THOSE CARDS. THE TOTAL WILL BE YOUR FRIEND'S NUMBER!

1	3	5	7	9	11	13	15
17	19	21	23	25	27	29	31
33	35	37	39	41	43	45	47
49	51	53	55	57	59	61	63

CARD A

2	3	6	7	10	11	14	15
18	19	22	23	26	27	30	31
34	35	38	39	42	43	46	47
50	51	54	55	58	59	62	63

CARD B

4	5	6	7	12	13	14	15
20	21	22	23	28	29	30	31
36	37	38	39	44	45	46	47
52	53	54	55	60	61	62	63

CARD C

8	9	10	11	12	13	14	15
24	25	26	27	28	29	30	31
40	41	42	43	44	45	46	47
56	57	58	59	60	61	62	63

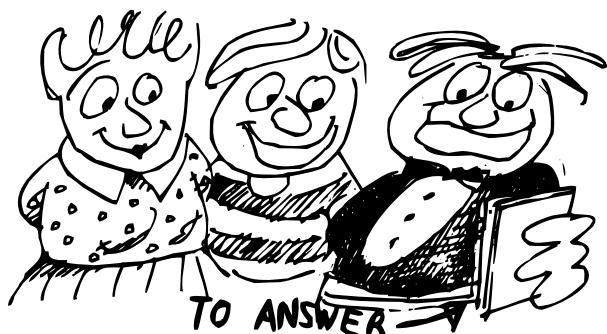
CARD D

16	17	18	19	20	21	22	23
24	25	26	27	28	29	30	31
48	49	50	51	52	53	54	55
56	57	58	59	60	61	62	63

CARD E

32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47
48	49	50	51	52	53	54	55
56	57	58	59	60	61	62	63

CARD F



# WHIZZ-KIDS WORKSHEET

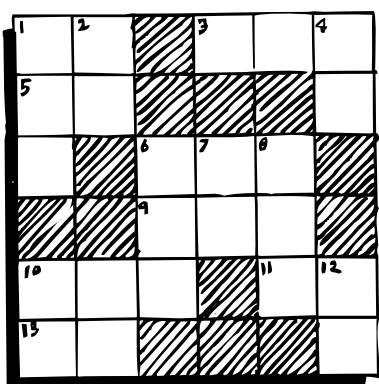


## NIFTY NUMBERS

$$\begin{array}{lcl} 5+27 = \underline{\quad} & 15-7 = \underline{\quad} \\ 20-12 = \underline{\quad} & 40 \div 8 = \underline{\quad} \\ 68+9 = \underline{\quad} & 81 \div 9 = \underline{\quad} \\ 92-11 = \underline{\quad} & 49 \div 7 = \underline{\quad} \\ 7 \times 45 = \underline{\quad} & 36 \div 6 = \underline{\quad} \\ 18 \times 6 = \underline{\quad} & 45+45 = \underline{\quad} \\ 300 \div 60 = \underline{\quad} & 90 \div 2 = \underline{\quad} \\ 200 \div 200 = \underline{\quad} & 100 \div 4 = \underline{\quad} \\ 3 \times 24 = \underline{\quad} & 3 \times 36 = \underline{\quad} \\ 108-92 = \underline{\quad} & 105 \times 5 = \underline{\quad} \end{array}$$

## VISCOUS VARIABLES

$$\begin{array}{l} a + a + a + a + a = \underline{\quad} \\ 4b + 2b + 3b = \underline{\quad} \\ 4x + 2x + 2y + 4y = \underline{\quad} \\ (2b + 3b) \times 4 = \underline{\quad} \\ 4y \div 2y = \underline{\quad} \\ 6x \cdot 2 = \underline{\quad} \\ 4a + 2a + 3b = \underline{\quad} \\ 5k - 5k = \underline{\quad} \\ 8c + 2c + 50c = \underline{\quad} \\ 9a \cdot 2 = \underline{\quad} \end{array}$$



## EASY EQUATIONS

$$\begin{array}{l} 20 = \underline{\quad} \times 5 \\ 24 \div \underline{\quad} = 6 \\ 12 \times 2 = 8 \times \underline{\quad} \\ 5 \times \underline{\quad} = 15 \times 1 \\ 20 + 4 = 6 \times \underline{\quad} \\ 38 \div 2 = 15 + \underline{\quad} \\ 18 - 3 = 5 \times \underline{\quad} \\ \frac{1}{2} \text{ OF } \underline{\quad} = 10 \\ 12 - 4 + 4 = \underline{\quad} \\ \underline{\quad} 40 = 20 \end{array}$$

## MONEY MIXTURES

COST OF 4 ICECREAMS AT 70¢ EACH  $\underline{\quad}$   
 $\frac{1}{2}$  OF \$5  $\underline{\quad}$   
 SPEND \$3.70, CHANGE FROM \$5  $\underline{\quad}$   
 $\frac{1}{2}$  kg OF RICE AT 90¢ kg  $\underline{\quad}$   
 \$800 + \$30  $\underline{\quad}$   
 2 SAUSAGE ROLLS AT 45¢ EACH  $\underline{\quad}$   
 $\underline{\quad}$  CHANGE FROM \$1 FOR 2 SAUSAGE ROLLS  $\underline{\quad}$

## CROSS NUMBER

### DOWN

- 1,  $2 \times 1626$
- 3,  $5 \times 5$
- 4,  $5 \times 11$
- 6,  $200 + 50$
- 7,  $7 \times 7$
- 8, DOUBLE 101

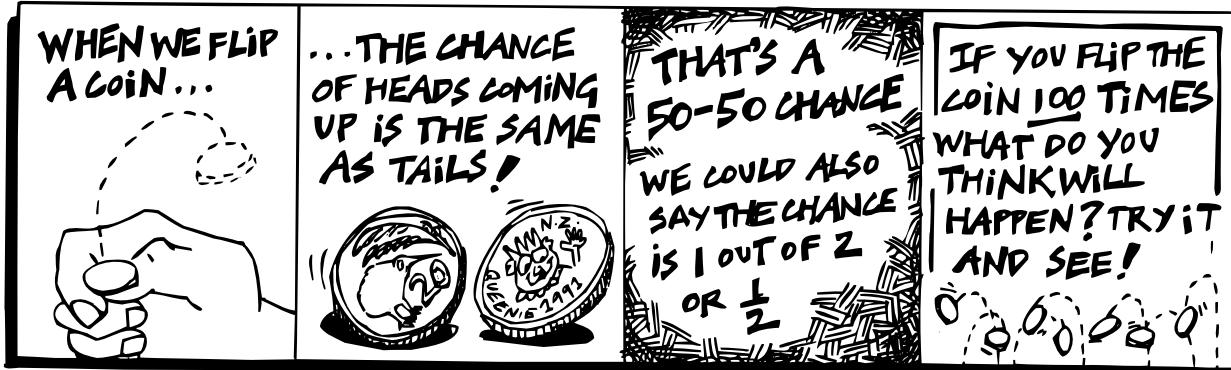
### ACROSS

- 10,  $5 \times 13$
- 11,  $\frac{1}{2}$  OF 164
- 12,  $144 \div 12$
- 13,  $21 \times 5$
- 14,  $27 + 24$
- 5,  $45 \div 3$
- 6, DOUBLE 121
- 9,  $500 + 90$
- 19, TRIPLE 200

NUMBER OF MISTAKES  $\underline{\quad}$

# DO-DA-CRAZY COIN FLIP!!

- AND LEARN ABOUT PROBABILITY!



- RECORD ALL YOUR RESULTS IN THE TALLY TABLE BELOW

HEADS	TAILS

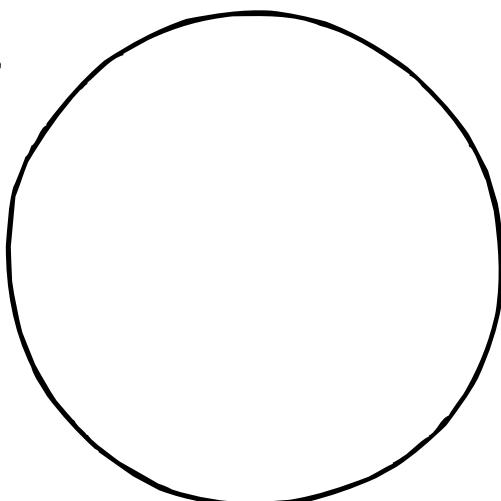
FLIP THE COIN FOR A TOTAL OF 100 TIMES. DON'T FORGET TO TALLY EACH FLIP ON THE TABLE!

WHAT HAPPENED AFTER 100 FLIPS?  
IS THE FINAL OUTCOME "50-50"?  
THE PROBABILITY OF TAILS TURNING UP IS \_\_\_\_\_

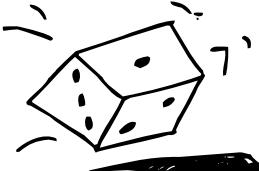
DRAW YOUR RESULTS ON A PIE GRAPH.

- LIST 5 OTHER EXPERIMENTS WHICH WOULD HAVE EQUAL OUTCOMES.

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_



# DICEY DILEMMA



PROBABILITY IS THE STUDY OF HOW OFTEN SOMETHING MIGHT HAPPEN. THE BEST WAY TO LEARN ABOUT PROBABILITY IS BY EXPERIMENTING. IN THIS ACTIVITY, YOU EXPERIMENT WITH DICE!

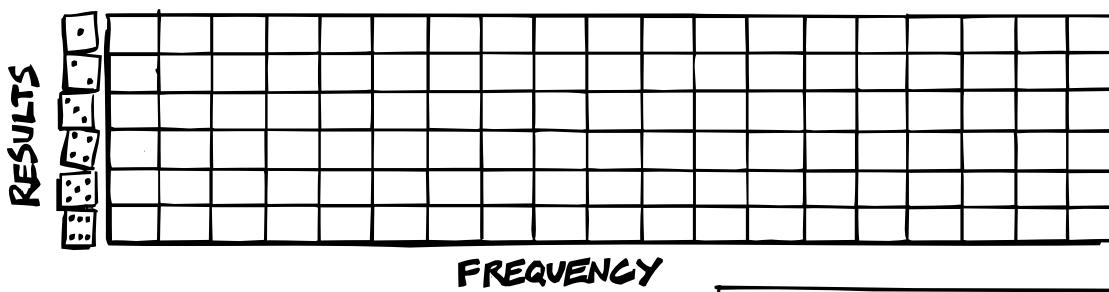
**TOSS THE DIE  
AND RECORD THE  
OUTCOME IN THE  
TALLY TABLE.  
REPEAT 60  
TIMES!**

OUTCOME	TALLY	TOTAL
 1		
 2		
 3		
 4		
 5		
 6		

## WHAT PATTERNS DID YOU NOTICE?

### WHICH OUTCOME IS MOST POPULAR?

DRAW YOUR RESULTS ON A PICTOGRAPH!



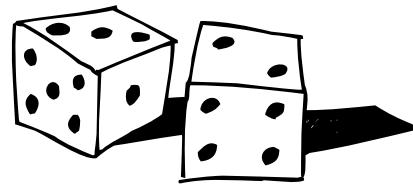
- TO CALCULATE PROBABILITY,  $P =$

**IF WE ROLLED THE DICE ONCE MORE, CALCULATE...**

$$\begin{array}{ll} P(\text{GETTING A ONE}) = \underline{\hspace{2cm}} & P(\text{GETTING A FOUR}) = \underline{\hspace{2cm}} \\ P(\text{GETTING A TWO}) = \underline{\hspace{2cm}} & P(\text{GETTING A FIVE}) = \underline{\hspace{2cm}} \\ P(\text{GETTING A THREE}) = \underline{\hspace{2cm}} & P(\text{GETTING A SIX}) = \underline{\hspace{2cm}} \end{array}$$

ADD ALL THESE PROBABILITIES TOGETHER. WHAT DO YOU GET?  
WHY? \_\_\_\_\_

... 100 THROWS?  
- YOU NEED A PAIR OF  
DICE!



IF YOU ROLL BOTH DICE, THEN ADD THE  
2 NUMBERS ↓ ↓  
THE SUMS YOU  
CAN GET ARE: 2, 3, 4, 5, 6  
7, 8, 9, 10, 11, 12.

POSSIBLE SUMS	TALLY	TOTAL
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

THROW THE DICE  
100 TIMES AND  
RECORD THE 'SUMS'  
YOU GET!

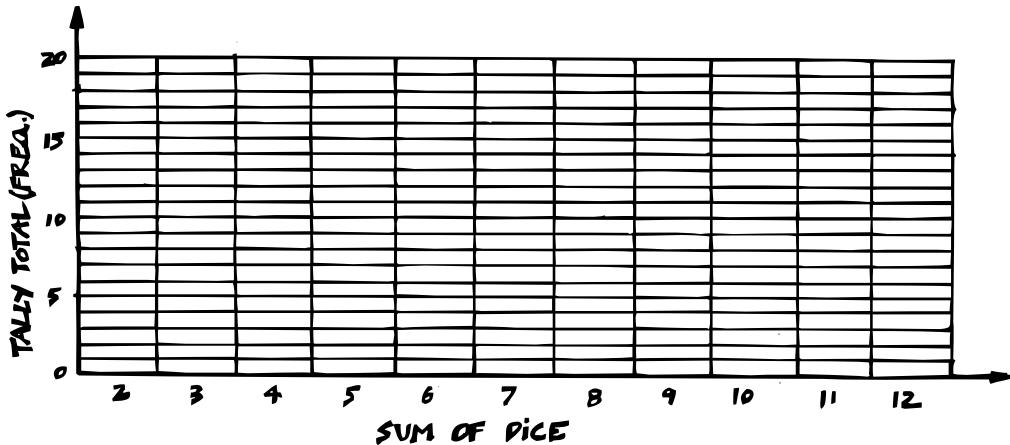
WHICH OUTCOME IS  
MOST POPULAR?

WHICH OUTCOME IS  
LEAST POPULAR?

USE YOUR EXPERIMENT  
RESULTS TO CALCULATE  
THE PROBABILITIES  
BELOW!

- PROBABILITY OF GETTING A SUM OF 4 = \_\_\_\_\_
  - PROBABILITY OF GETTING A SUM OF 7 = \_\_\_\_\_
  - PROBABILITY OF GETTING A SUM OF 12 = \_\_\_\_\_
- ARE THESE ANSWERS THE SAME? \_\_\_\_\_ WHY? \_\_\_\_\_

DRAW YOUR  
RESULTS ON  
A BAR GRAPH!  
\_\_\_\_\_



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{aligned}38 - 16 &= \underline{\hspace{2cm}} \\46 + 49 &= \underline{\hspace{2cm}} \\48 + 45 &= \underline{\hspace{2cm}} \\53 - 27 &= \underline{\hspace{2cm}} \\40 \times 11 &= \underline{\hspace{2cm}} \\32 \times 4 &= \underline{\hspace{2cm}} \\28 \times 7 &= \underline{\hspace{2cm}} \\45 \div 9 &= \underline{\hspace{2cm}} \\32 \div 8 &= \underline{\hspace{2cm}} \\64 - 26 &= \underline{\hspace{2cm}}\end{aligned}$$

## DANDY DECIMALS

$$\begin{aligned}1.6 + 1.7 &= \underline{\hspace{2cm}} \\2.3 + 1.9 &= \underline{\hspace{2cm}} \\2.5 + 3.5 &= \underline{\hspace{2cm}} \\1.9 - 0.8 &= \underline{\hspace{2cm}} \\2.4 - 1.6 &= \underline{\hspace{2cm}} \\10 \times 5.61 &= \underline{\hspace{2cm}} \\100 \times 23.4 &= \underline{\hspace{2cm}} \\43.2 \div 10 &= \underline{\hspace{2cm}} \\69\% \text{ AS A DECIMAL IS } &\underline{\hspace{2cm}} \\9\% \text{ AS A DECIMAL IS } &\underline{\hspace{2cm}}\end{aligned}$$

## RADICAL ROMANS

$$\begin{aligned}\text{LII} &= \underline{\hspace{2cm}} \\\text{LXXV} &= \underline{\hspace{2cm}} \\\text{CXXV} &= \underline{\hspace{2cm}} \\\text{CC} &= \underline{\hspace{2cm}} \\\text{MM} &= \underline{\hspace{2cm}} \\&= 50 \\&= 100 \\&= 300 \\&= 1000 \\&= 3000\end{aligned}$$



## THE QUINTUS QUIZ

I LEFT HOME AT                   
 IT TOOK        MINUTES TO  
 GET TO SCHOOL. SCHOOL WENT  
 FOR        HOURS. SUPPER  
 WAS AT        TODAY. I WAS  
 OUT OF BED FOR        HOURS.

## EXTRA EXAMPLES

$$\begin{aligned}471 + 400 &= \underline{\hspace{2cm}} \\800 + 800 &= \underline{\hspace{2cm}} \\600 - 321 &= \underline{\hspace{2cm}} \\700 - 490 &= \underline{\hspace{2cm}} \\110 \times 5 &= \underline{\hspace{2cm}} \\234 \times 10 &= \underline{\hspace{2cm}} \\432 \div 100 &= \underline{\hspace{2cm}} \\800 \div 40 &= \underline{\hspace{2cm}} \\999 + 888 &= \underline{\hspace{2cm}} \\999 - 888 &= \underline{\hspace{2cm}}\end{aligned}$$

### -FRIDAY-

OUT OF BED 7.15  
 LEFT HOME 8.05  
 GOT TO SCHOOL 8.40  
 SCHOOL FINISHED 3.10  
 ARRIVED HOME 4.00  
 SUPPERTIME 9.25  
 INTO MY BED 11.30

NUMBER OF MISTAKES

# INTRODUCING...

## THE TOPPS OF AVERAGE TOWN!

WHAT ARE THESE AVERAGES WE OFTEN USE?

- MODE \_\_\_\_\_
- MEDIAN \_\_\_\_\_
- MEAN \_\_\_\_\_
- RANGE \_\_\_\_\_

### THE TOPP'S FAMILY STATISTICS

WHO	AGE	I.Q.	MASS kg
DAD TOPP	40	100	80
MUM TOPP	35	110	50
TAI TOPP	13	120	35
ANA TOPP	6	110	30
KIKI TOPP	6	110	25

- MODE AGE \_\_\_\_\_ MEAN AGE \_\_\_\_\_ MEDIAN AGE \_\_\_\_\_  
 AGE RANGE \_\_\_\_\_ MEAN MASS \_\_\_\_\_ MASS RANGE \_\_\_\_\_  
 MEDIAN MASS \_\_\_\_\_ MODE I.Q. \_\_\_\_\_ MEAN I.Q. \_\_\_\_\_  
 I.Q. RANGE \_\_\_\_\_ MEDIAN I.Q. \_\_\_\_\_ THE LIGHTEST TOPP IS \_\_\_\_\_

### TOPP TALLIES!

TAI'S HOURS DOING HOMEWORK LAST WEEK: 2, 4, 2, 1, 3, 0.  
 MODE TIME \_\_\_\_\_  
 MEDIAN TIME \_\_\_\_\_  
 MEAN TIME \_\_\_\_\_  
 RANGE OF TIMES \_\_\_\_\_

DAD'S GOLF SCORES LAST YEAR WERE:

72, 66, 70, 67, 73, 68, 74

RANGE OF SCORES \_\_\_\_\_

MEDIAN SCORE \_\_\_\_\_

MEAN SCORE \_\_\_\_\_

BEST ROUND \_\_\_\_\_

... AND SOME OF YOUR OWN STATISTICS!

- THE MEAN AGE OF OUR CLASS IS \_\_\_\_\_  
 THE MODE AGE OF OUR CLASS IS \_\_\_\_\_  
 THE MEDIAN TIME I SPEND SLEEPING \_\_\_\_\_

# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$17 - 15 = \underline{\hspace{2cm}}$   
 $43 + 16 = \underline{\hspace{2cm}}$   
 $19 + 17 = \underline{\hspace{2cm}}$   
 $42 - 13 = \underline{\hspace{2cm}}$   
 $13 \times 8 = \underline{\hspace{2cm}}$   
 $7 \times 11 = \underline{\hspace{2cm}}$   
 $12 \times 60 = \underline{\hspace{2cm}}$   
 $32 \div 4 = \underline{\hspace{2cm}}$   
 $84 \div 12 = \underline{\hspace{2cm}}$   
 $37 + 24 = \underline{\hspace{2cm}}$

## MONEY MIXTURES

$48c + 17c = \underline{\hspace{2cm}}$   
 $48c - 17c = \underline{\hspace{2cm}}$   
 $4 \times 30c = \underline{\hspace{2cm}}$   
 $25c + 60c + 24c = \underline{\hspace{2cm}}$   
 $\$2 + \$3 + \$12 = \underline{\hspace{2cm}}$   
 HOW MANY 10c COINS MAKE \$9?  $\underline{\hspace{2cm}}$   
 HOW MANY 20c COINS MAKE \$4?  $\underline{\hspace{2cm}}$   
 $56c + 28c = \underline{\hspace{2cm}}$   
 $56c - 28c = \underline{\hspace{2cm}}$   
 $\$1.32 + \$2.31 = \underline{\hspace{2cm}}$

## VISCIOS VARIABLES

$a + a + a = \underline{\hspace{2cm}}$   
 $b + 2b = \underline{\hspace{2cm}}$   
 $3c + 4c = \underline{\hspace{2cm}}$   
 $5d + 7d = \underline{\hspace{2cm}}$   
 $2e - e = \underline{\hspace{2cm}}$   
 $14f - 4f = \underline{\hspace{2cm}}$   
 $10g - 5g = \underline{\hspace{2cm}}$   
 $6h + 2h = \underline{\hspace{2cm}}$   
 $17i + 7i = \underline{\hspace{2cm}}$   
 $6j - 6j = \underline{\hspace{2cm}}$

## EXTRA EXAMPLES

$500 + 216 = \underline{\hspace{2cm}}$   
 $180 - 94 = \underline{\hspace{2cm}}$   
 $8 \times 60 = \underline{\hspace{2cm}}$   
 $20 \times 100 = \underline{\hspace{2cm}}$   
 $800 \div 16 = \underline{\hspace{2cm}}$   
 $203 + 302 = \underline{\hspace{2cm}}$   
 $415 - 310 = \underline{\hspace{2cm}}$   
 $210 \div 7 = \underline{\hspace{2cm}}$   
 $324 + 177 = \underline{\hspace{2cm}}$   
 $423 - 222 = \underline{\hspace{2cm}}$

## THE QUINTUS QUIZ

- HOW MANY DAYS IN NOVEMBER?  $\underline{\hspace{2cm}}$
- WHAT DAY IS OCTOBER 29th?  $\underline{\hspace{2cm}}$
- WHAT DATE IS THE FIRST FRIDAY OF OCTOBER?  $\underline{\hspace{2cm}}$
- WHAT DATE IS THE FOURTH SUNDAY OF NOVEMBER?  $\underline{\hspace{2cm}}$
- HOW MANY THURSDAYS IN OCTOBER?  $\underline{\hspace{2cm}}$

OCTOBER						
M	T	W	T	F	S	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

NOVEMBER						
M	T	W	T	F	S	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

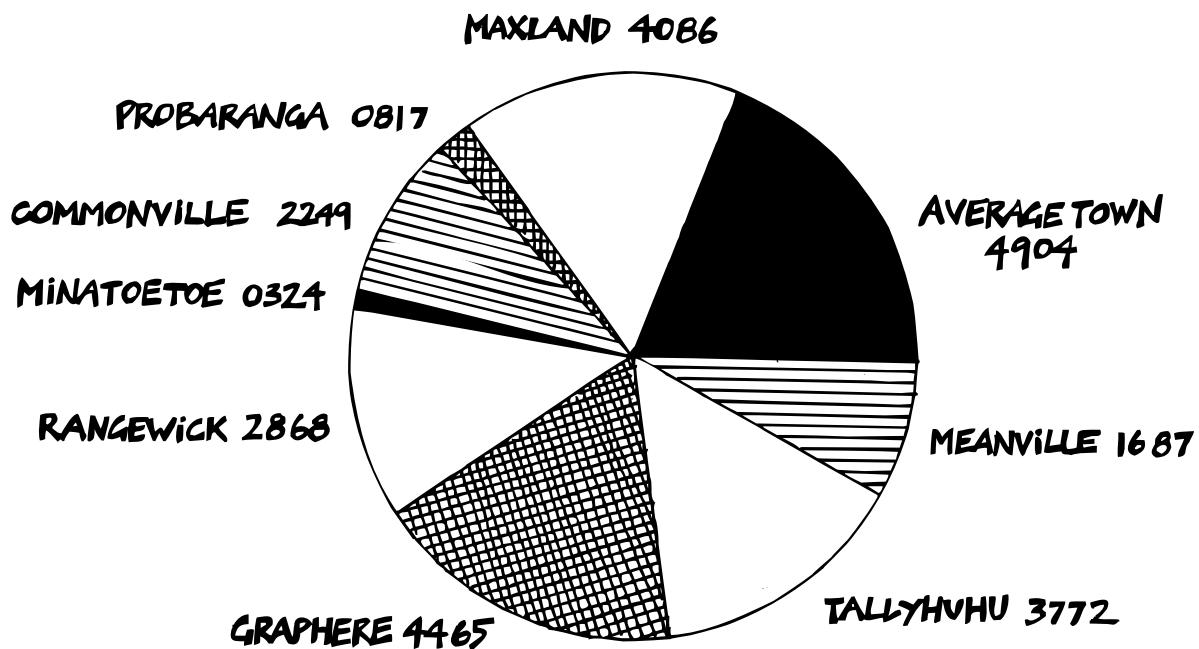


NUMBER OF MISTAKES  $\underline{\hspace{2cm}}$

# "ROUND-UP-TIME!"

12 MAY BE ROUNDED DOWN  $\approx 10$   
99 MAY BE ROUNDED UP  $\approx 100$ . GET IT!

## -A BREAKDOWN OF CRIME FIGURES IN STATISTIC CITY



SUBURB	NUMBER OF CRIMES		
	TO THE NEAREST 10	TO THE NEAREST 100	TO THE NEAREST 1000
<b>TOTALS</b>			

ADD ALL THE ACTUAL CRIME FIGURES.  
WHICH APPROXIMATION TOTAL IS CLOSEST TO THIS?

# ... AND CRIMES SOLVED...

PERCENTAGE OF CRIMES SOLVED			
SUBURB	ACTUAL	TO 1 DECIMAL PLACE	TO NEAREST WHOLE NUMBER
MAXLAND	42.61		
AVERAGE TOWN	38.383		
MEANVILLE	41.75		
TALLYHUVHU	34.92		
GRAPHERE	33.166		
RANGEWICK	35.50		
MiNATOETOE	37.27		
COMMONVILLE	43.44		
PROBARANGA	39.89		
OVERALL	1.		

- TO FIND THE OVERALL % OF CRIMES SOLVED YOU HAVE TO :

- 1 ADD THE FIGURES
  - 2 DIVIDE THE TOTAL BY NINE
- WRITE YOUR ANSWER IN POSITION 1.

NOW ORDER YOUR LUNCH FROM THE POLICE CANTEEN - ROUND ALL PRICES TO THE NEAREST 5c

— 70 — 80 — 85 — 85 — 75 — 75 —

- iN -

— 85 — 70 —

— 90 — 80 — 85 — 85 — 70 —

U  
M  
Y  
E  
T

!

POLICE  
CANTEEN

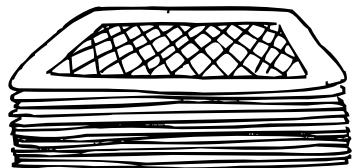
- SANDWICH - 78c
- PIE 83c -
- CAKE 72c -
- DRINK 74c -
- ROLL 89c -

# BIG DEAL!

YOU NEED...



...A DECK  
OF PLAYING  
CARDS



TAKE THE  
PICTURE  
CARDS OUT OF  
THE DECK

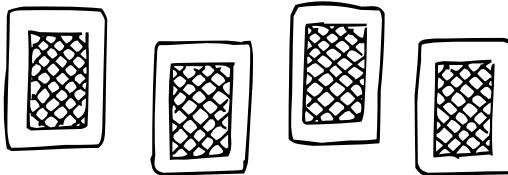


AND FIND  
2 TO 6  
PLAYERS

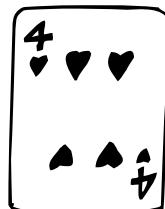


## HOW TO PLAY

1. DEAL 4 CARDS TO  
EACH PLAYER



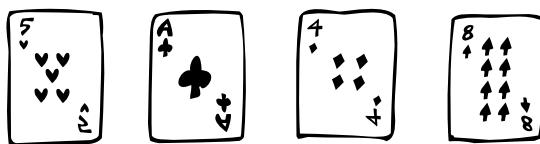
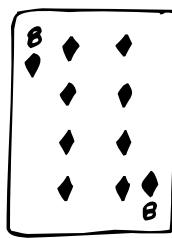
2. THE DEALER THEN  
PLACES AN EXTRA CARD  
(THE ANSWER CARD)  
FACE UP SO ALL CAN SEE  
IT!



3. EACH PLAYER MUST TRY TO  
ARRANGE THEIR CARDS TO MAKE THE AMOUNT ON THE  
ANSWER CARD. YOU CAN +, -, X OR ÷. (ACE = 1)

4. YOU CAN ASK THE DEALER FOR EXTRA CARDS IF  
NEEDED, BUT YOU MUST USE THEM ALL.

## EXAMPLE



$$(5 - 1) \times 4 - 8 = 8$$

FIRST FINISHED - 2 POINTS

SECOND & THIRD FINISHED - 1 POINT

THE WINNER IS THE FIRST ONE TO  
REACH 12 POINTS



# WHIZZ-KIDS WORKSHEET



## NIFTY NUMBERS

$25 - 21 = \underline{\quad}$

$34 + 35 = \underline{\quad}$

$91 + 12 = \underline{\quad}$

$36 - 29 = \underline{\quad}$

$15 \times 7 = \underline{\quad}$

$8 \times 20 = \underline{\quad}$

$10 \times 32 = \underline{\quad}$

$44 \div 11 = \underline{\quad}$

$64 \div 8 = \underline{\quad}$

$100 \div 25 = \underline{\quad}$

## TRENDY TABLES

$12 \times \underline{\quad} = 12$

$12 \times \underline{\quad} = 24$

$12 \times 3 = \underline{\quad}$

$12 \times 4 = \underline{\quad}$

$12 \times 5 = \underline{\quad}$

$12 \times \underline{\quad} = 84$

$12 \times \underline{\quad} = 96$

$12 \times \underline{\quad} = 120$

$12 \times 0 = \underline{\quad}$

$12 \times 11 = \underline{\quad}$

## SOFT SUBSTITUTES

$a = 25, a + 8 = \underline{\quad}$

$b = 34, b + 11 = \underline{\quad}$

$c = 46, c + 23 = \underline{\quad}$

$d = 62, 7 + d = \underline{\quad}$

$e = 31, 14 + e = \underline{\quad}$

$r = 48, 17 + r = \underline{\quad}$

$s = 50, 29 + s = \underline{\quad}$

$t = 54, t - 30 = \underline{\quad}$

$u = 20, u - 14 = \underline{\quad}$

$v = 40, 3v = \underline{\quad}$

## EXTRA EXAMPLES

$90 \text{ SUBTRACT } 48 \text{ IS } \underline{\quad}$

$84 \text{ DIVIDED BY } 6 \text{ IS } \underline{\quad}$

$\$24 \cdot 20 \times 5 = \underline{\quad}$

$\$36 \cdot 85 \times 20 = \underline{\quad}$

$1234 = 1000 + \underline{\quad} + \underline{\quad} + \underline{\quad}$

$2806 + 708 = \underline{\quad}$

$4091 = \underline{\quad} + 0 + \underline{\quad} + 1$

$3456 + 6543 = \underline{\quad}$

$8765 - 5678 = \underline{\quad}$

$777 + 888 = \underline{\quad}$

## THE QUINTUS QUIZ

-FIND THE COST FOR...

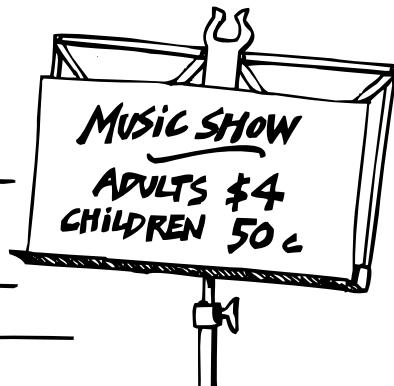
1 ADULT & 1 CHILD           

2 ADULTS & 2 CHILDREN           

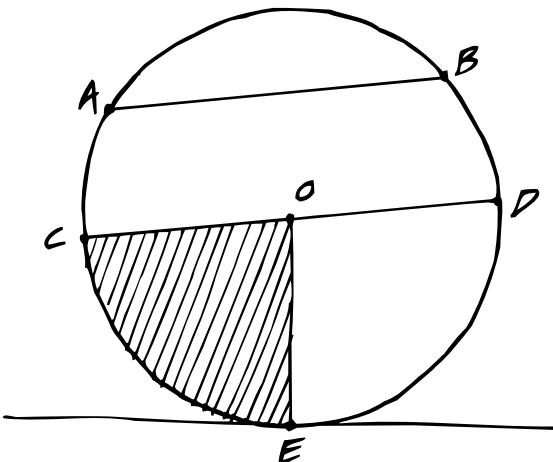
4 ADULTS & 1 CHILD           

1 ADULT & 3 CHILDREN           

3 ADULTS & 10 CHILDREN           



NUMBER OF MISTAKES



COMPLETE THE STATEMENTS BELOW USING THE CIRCLE DIAGRAM. PUT THE LETTER ABOVE THE CORRECT ANSWER IN THE CODE!

H

A LINE THAT ONLY TOUCHES A CIRCLE AT ONE POINT \_\_\_\_\_

L

A DIAMETER IS \_\_\_\_\_ THE RADIUS

C

LINE  $\overline{AB}$  IS CALLED A \_\_\_\_\_

H

THE DISTANCE AROUND A CIRCLE \_\_\_\_\_

R

IF  $\overline{OD}$  IS 20MM, THEN  $\overline{CD}$  IS \_\_\_\_\_

F

A CHORD THAT PASSES THROUGH A CIRCLE'S CENTRE \_\_\_\_\_

I

POINTS A, B, C, D AND E ARE ALL THE SAME \_\_\_\_\_ FROM THE CENTRE

Y

HALF A CIRCLE IS A \_\_\_\_\_

T

THE SHADED AREA  $\widehat{EOC}$  IS CALLED A \_\_\_\_\_

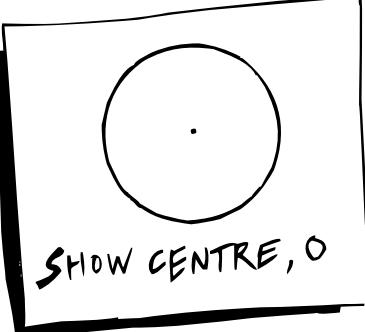
E

PART OF A CIRCLE e.g. THE POINTS BETWEEN A AND B \_\_\_\_\_

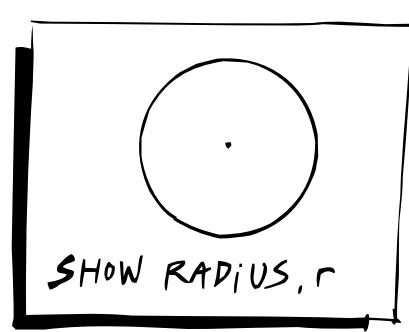
WHAT DO YOU CALL A MILLIONAIRE WHO NEVER WASHES?

DIAMETER	DISTANCE	TWICE	SECTOR	TANGENT	SEMICIRCLE	ROMM	RUC	CHORD	CIRCUMFERENCE

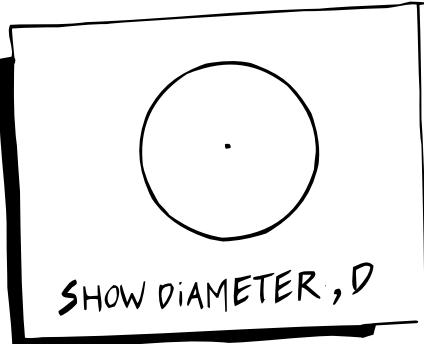
# — PARTS-N-CiRCLES —



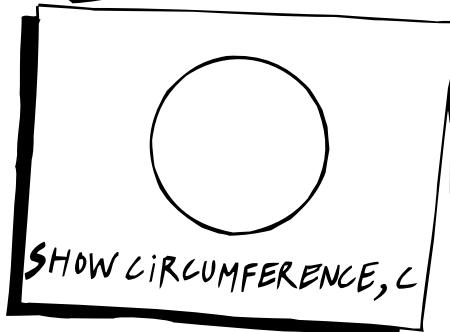
SHOW CENTRE, O



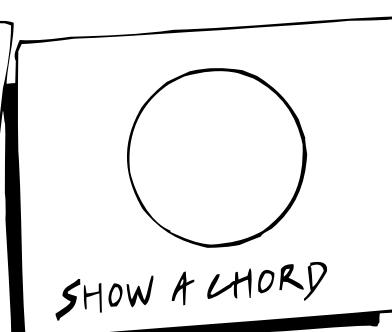
SHOW RADIUS, r



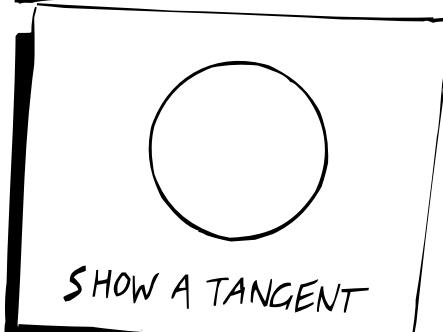
SHOW DIAMETER, D



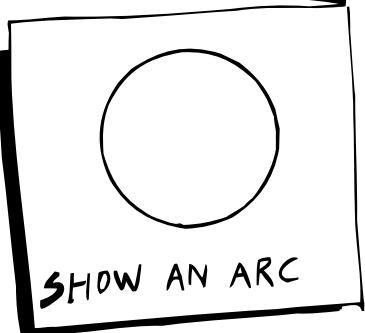
SHOW CIRCUMFERENCE, C



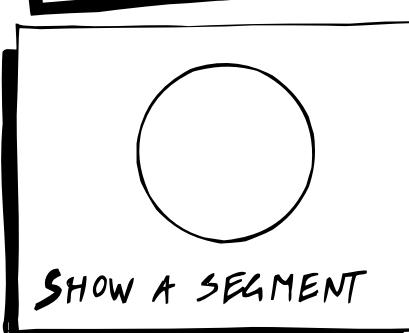
SHOW A CHORD



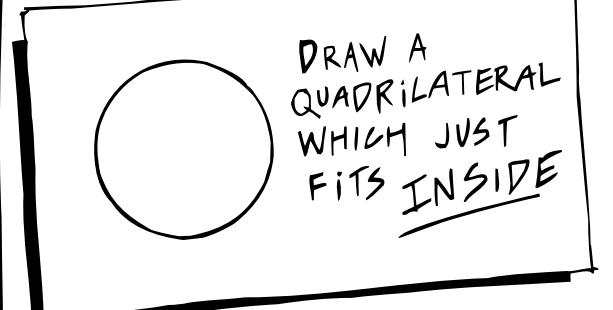
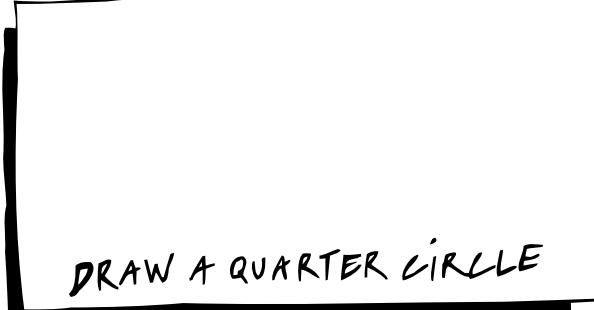
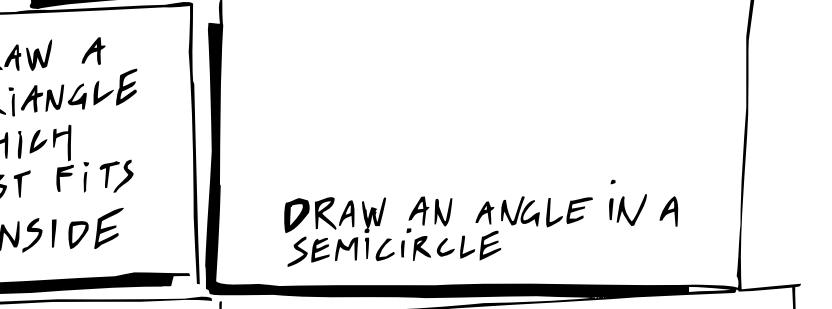
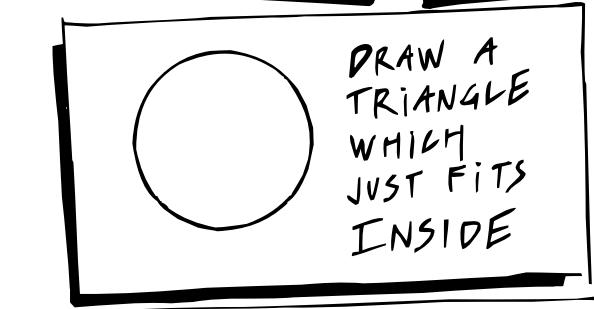
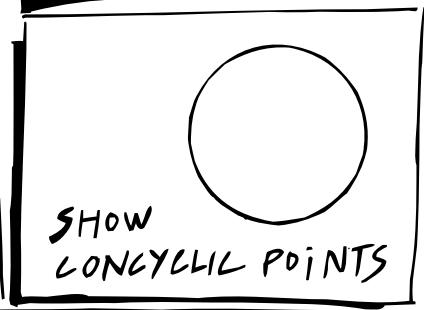
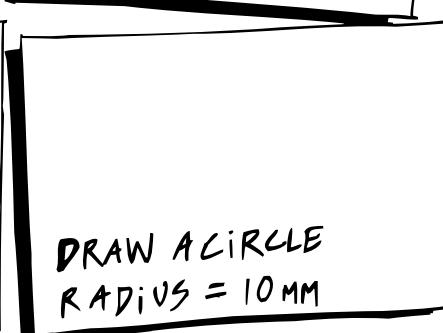
SHOW A TANGENT



SHOW AN ARC



SHOW A SEGMENT

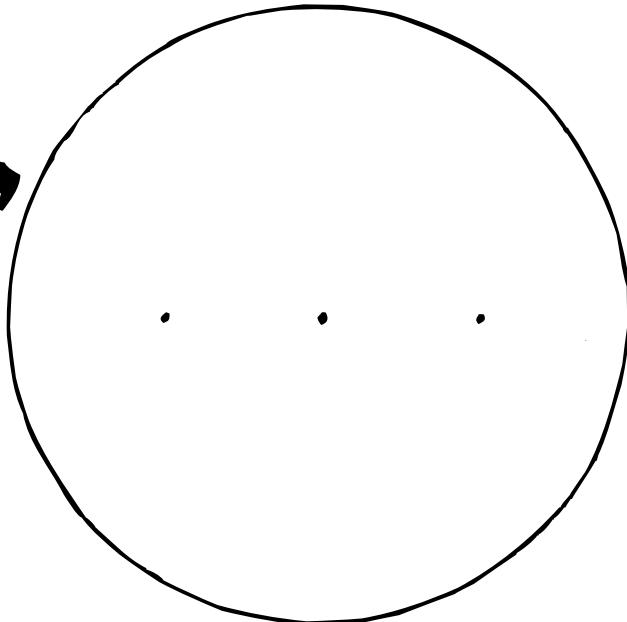




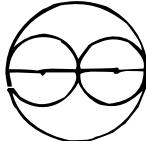
# BETTY'S BRILLIANT CIRCLE DESIGNS!

1

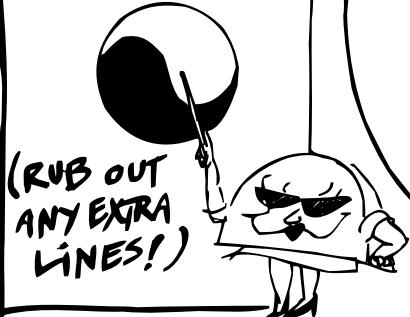
FIRST MEASURE  
THE DIAMETER  
OF THIS CIRCLE  
 $d = \underline{\hspace{2cm}}$  mm



NEXT DRAW  
2 CIRCLES  
INSIDE USING  
 $\frac{1}{2}$  THIS  
DIAMETER

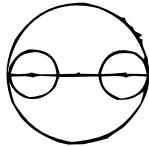


NOW COLOUR  
IN CAREFULLY  
TO MAKE...

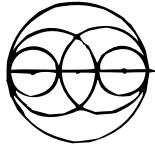


2

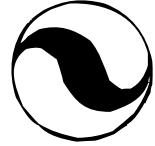
USING THE  
OTHER CIRCLE  
DRAW 2 SMALL  
CIRCLES  
INSIDE.



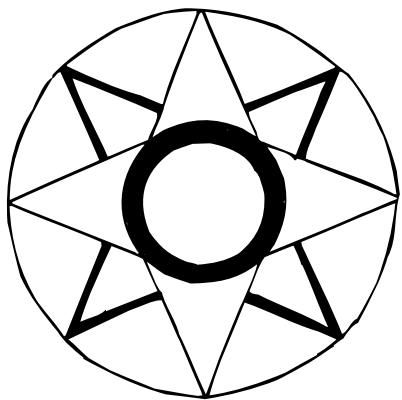
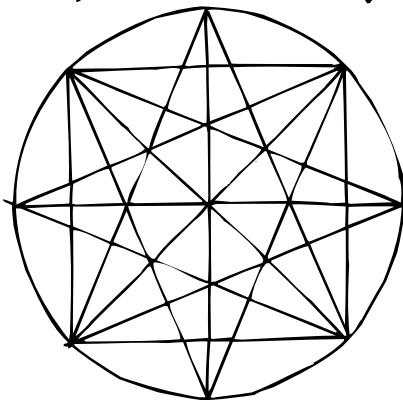
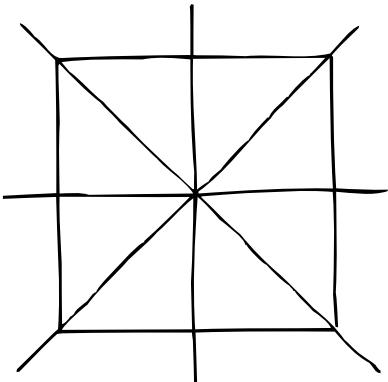
NOW DRAW  
2 LARGER  
CIRCLES TO  
MAKE ...



NEXT COLOUR  
IN TO GET...



ANOTHER DESIGN YOU MIGHT CONSTRUCT & COLOUR



# CiRCLE PATTERNS

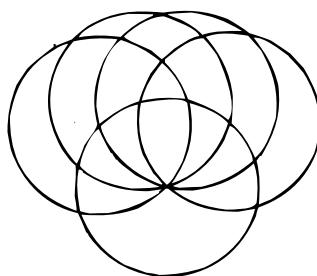
STEP 1

MEASURE THE  
RADIUS OF THE  
CIRCLE BELOW  
RADIUS =    MM



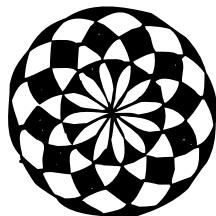
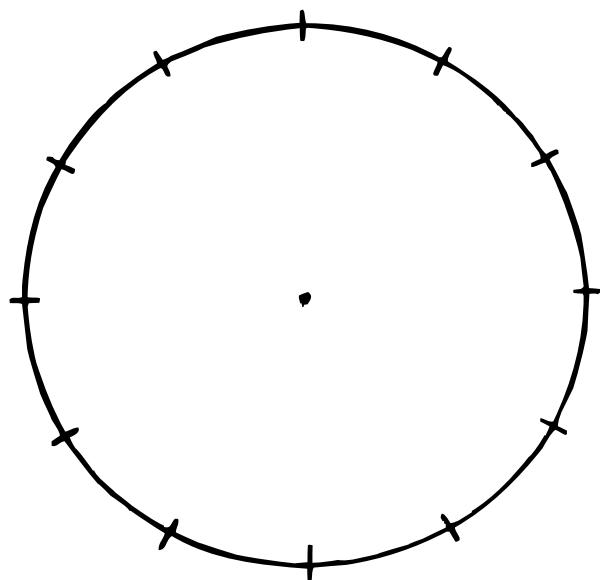
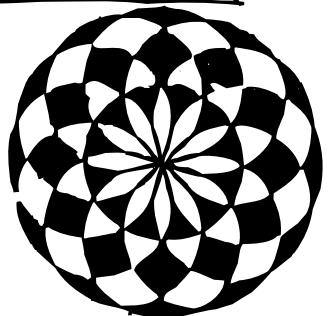
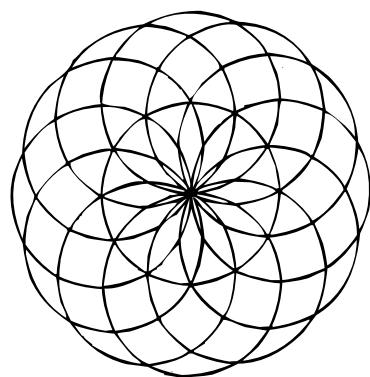
STEP 2

USE THIS RADIUS  
TO DRAW 12 NEW  
CIRCLES ON THE  
POINTS GIVEN



STEP 3

YOU SHOULD NOW  
HAVE THIS  
COLOUR YOUR  
DESIGN!



# WHIZZ-KIDS WORKSHEET!

## NIFTY NUMBERS

$$\begin{array}{l} 45 - 24 = \underline{\quad} \\ 37 + 38 = \underline{\quad} \\ 53 - 46 = \underline{\quad} \\ 62 + 52 = \underline{\quad} \\ 30 \times 12 = \underline{\quad} \\ 42 \times 5 = \underline{\quad} \\ 36 \div 9 = \underline{\quad} \\ 55 \div 11 = \underline{\quad} \\ 27 \times 6 = \underline{\quad} \\ 68 - 19 = \underline{\quad} \end{array}$$

## FANTASTIC FRACTIONS

$$\begin{array}{l} \frac{1}{3} \text{ OF } 6 = \underline{\quad} \\ \frac{1}{5} \text{ OF } 15 = \underline{\quad} \\ \frac{1}{4} \text{ OF } 8 = \underline{\quad} \\ \frac{1}{7} \text{ OF } 20 = \underline{\quad} \\ \frac{1}{4} \text{ OF } 40 = \underline{\quad} \\ \frac{1}{6} \times \frac{1}{6} = \underline{\quad} \\ \frac{1}{6} + \frac{1}{6} = \underline{\quad} \\ \frac{2}{7} \times \frac{6}{11} = \underline{\quad} \\ \frac{9}{10} + \frac{1}{10} = \underline{\quad} \\ \frac{9}{13} - \frac{5}{13} = \underline{\quad} \end{array}$$



## MIGHTY METRICS

**29**

## EXTRA EXAMPLES

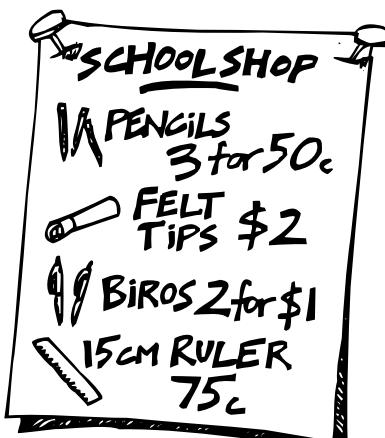
$$\begin{array}{l} 310\text{m} + 240\text{m} = \underline{\quad} \\ 146\text{m} - 58\text{m} = \underline{\quad} \\ 456\text{g} + 354\text{g} = \underline{\quad} \\ 231\text{g} - 85\text{g} = \underline{\quad} \\ 527\text{l} + 386\text{l} = \underline{\quad} \\ 394\text{l} - 159\text{l} = \underline{\quad} \\ 6500\text{m} = \underline{\quad} \text{ km} \\ \underline{\quad} \text{ m} = 6.75 \text{ km} \\ 931 \text{ cl} = \underline{\quad} \text{ l} \\ \underline{\quad} \text{ cl} = 9.6 \text{ l} \end{array}$$

$$\begin{array}{l} \underline{\quad} \text{ DAYS IN JULY} \\ 12 \text{ MONTHS} = \underline{\quad} \text{ YEAR} \\ 3.3 + 7.7 = \underline{\quad} \\ 3.6 - 2.8 = \underline{\quad} \\ 0.6 \times 5 = \underline{\quad} \\ 2.4 \div 6 = \underline{\quad} \\ 20, 19, 17, \underline{\quad}, 10 \\ 8080 + 808 = \underline{\quad} \\ 456 - 265 = \underline{\quad} \\ 2^3 = \underline{\quad} \end{array}$$

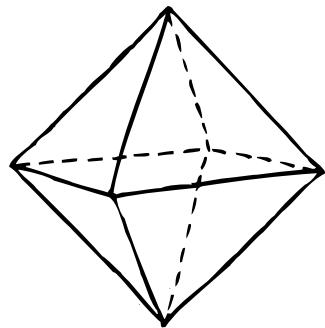
## THE QUINTUS QUIZ

FIND THE COST OF...

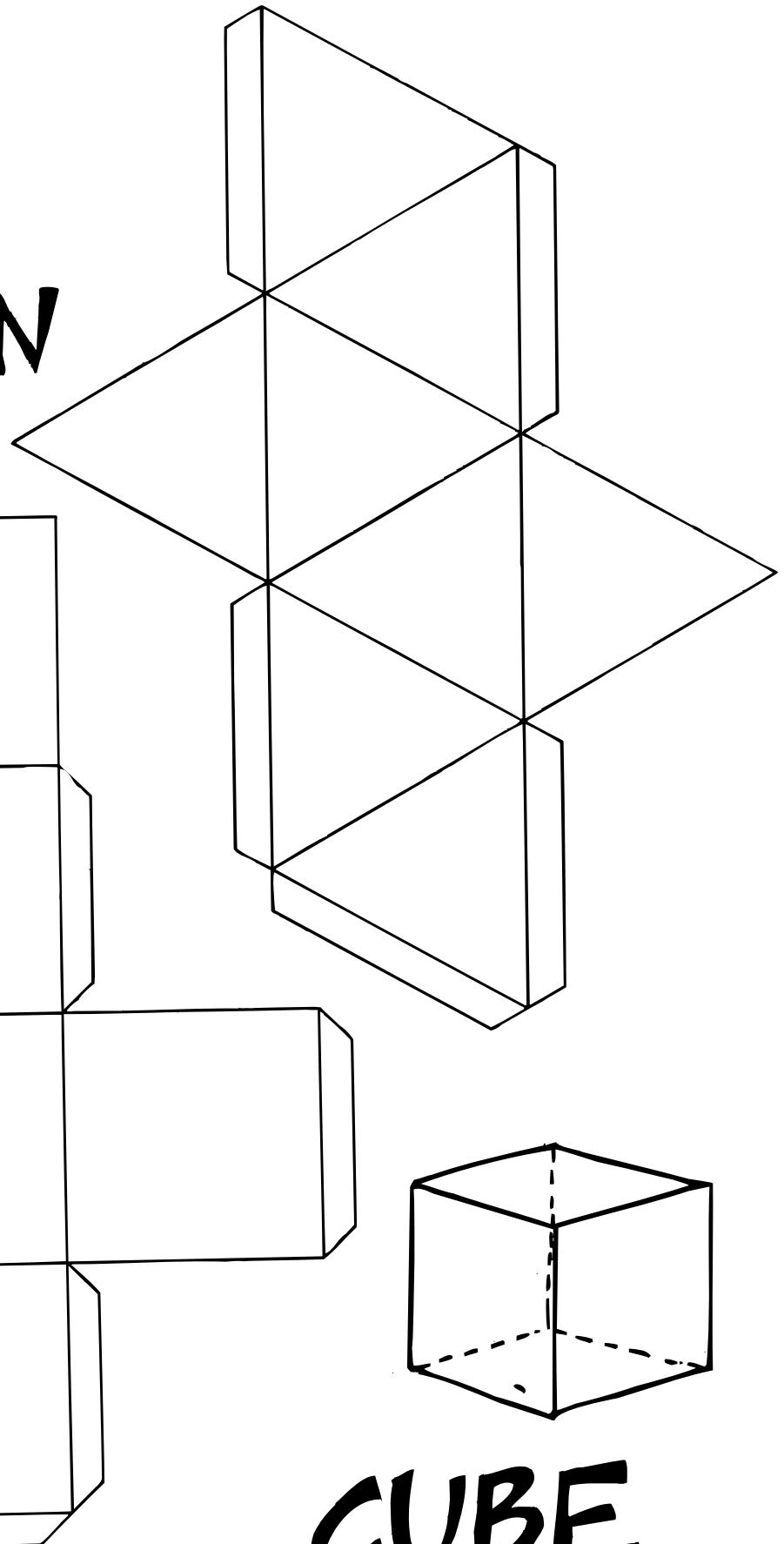
$$\begin{array}{l} 100 \text{ RULERS } \underline{\quad} \\ 100 \text{ BIROS } \underline{\quad} \\ 20 \text{ FELT TIPS & } 30 \text{ PENCILS } \underline{\quad} \\ 50 \text{ BIROS & } 100 \text{ FELT TIPS } \underline{\quad} \\ 50 \text{ RULERS & } 300 \text{ PENCILS } \underline{\quad} \end{array}$$



NUMBER OF MISTAKES

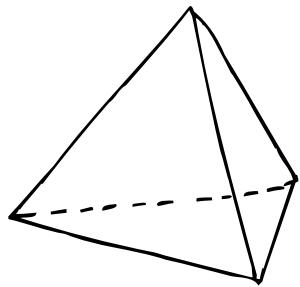


# OCTAHEDRON

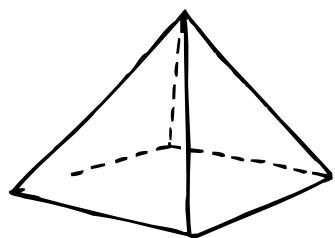
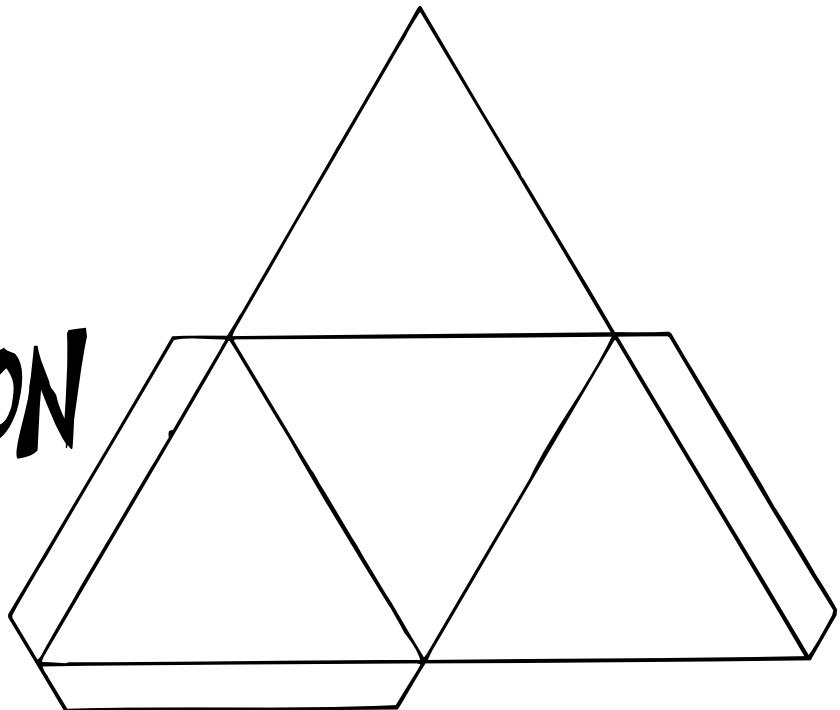


# CUBE

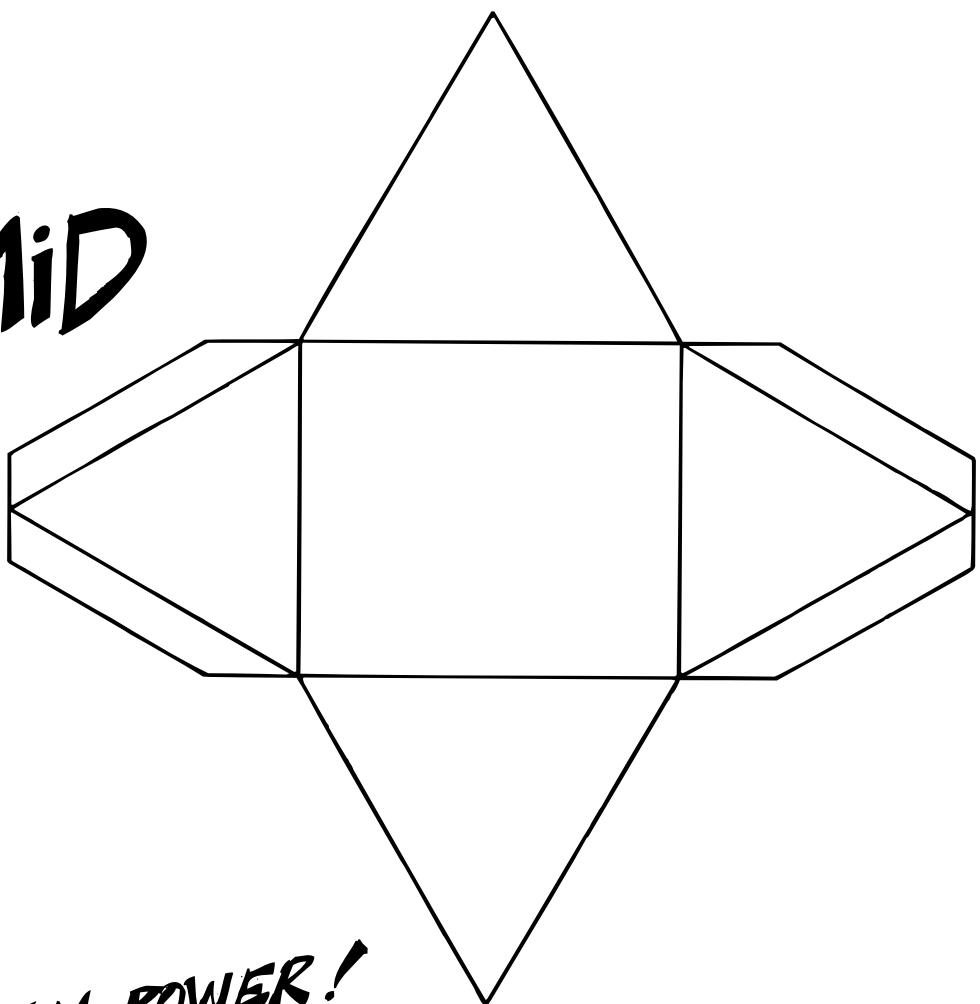
ON THE NEXT FEW PAGES ARE SOME EXAMPLE NETS.  
MAKE YOUR OWN ON A PIECE OF CARD.

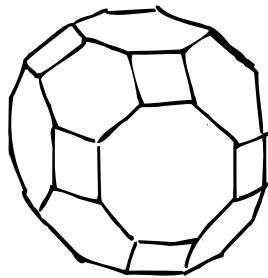


# TETRAHEDRON

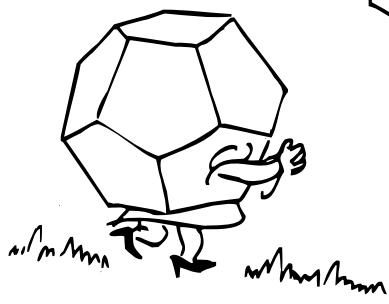
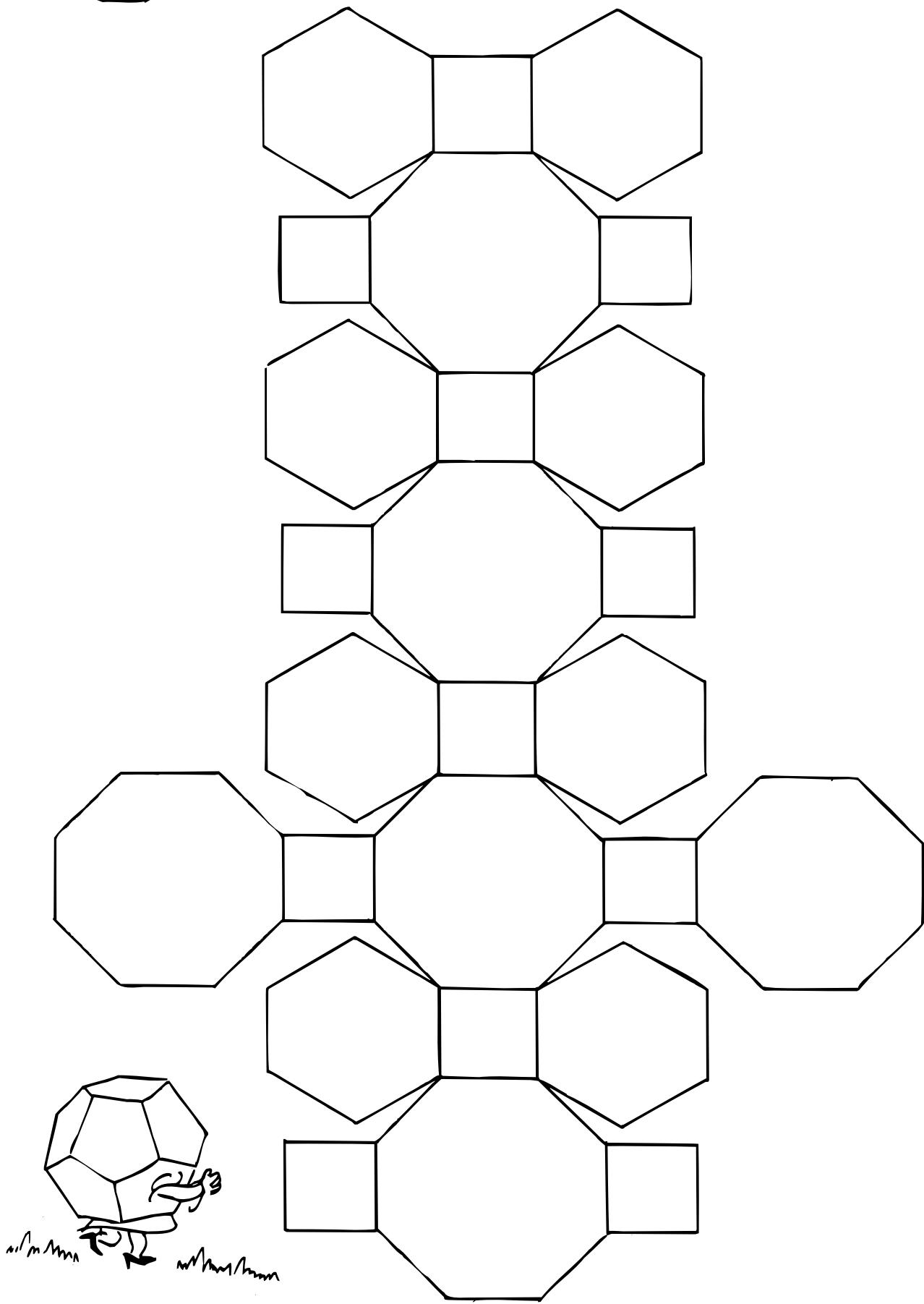


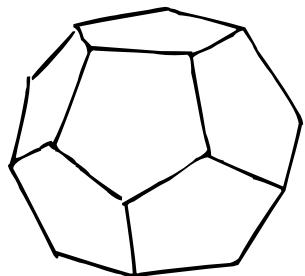
# PYRAMiD



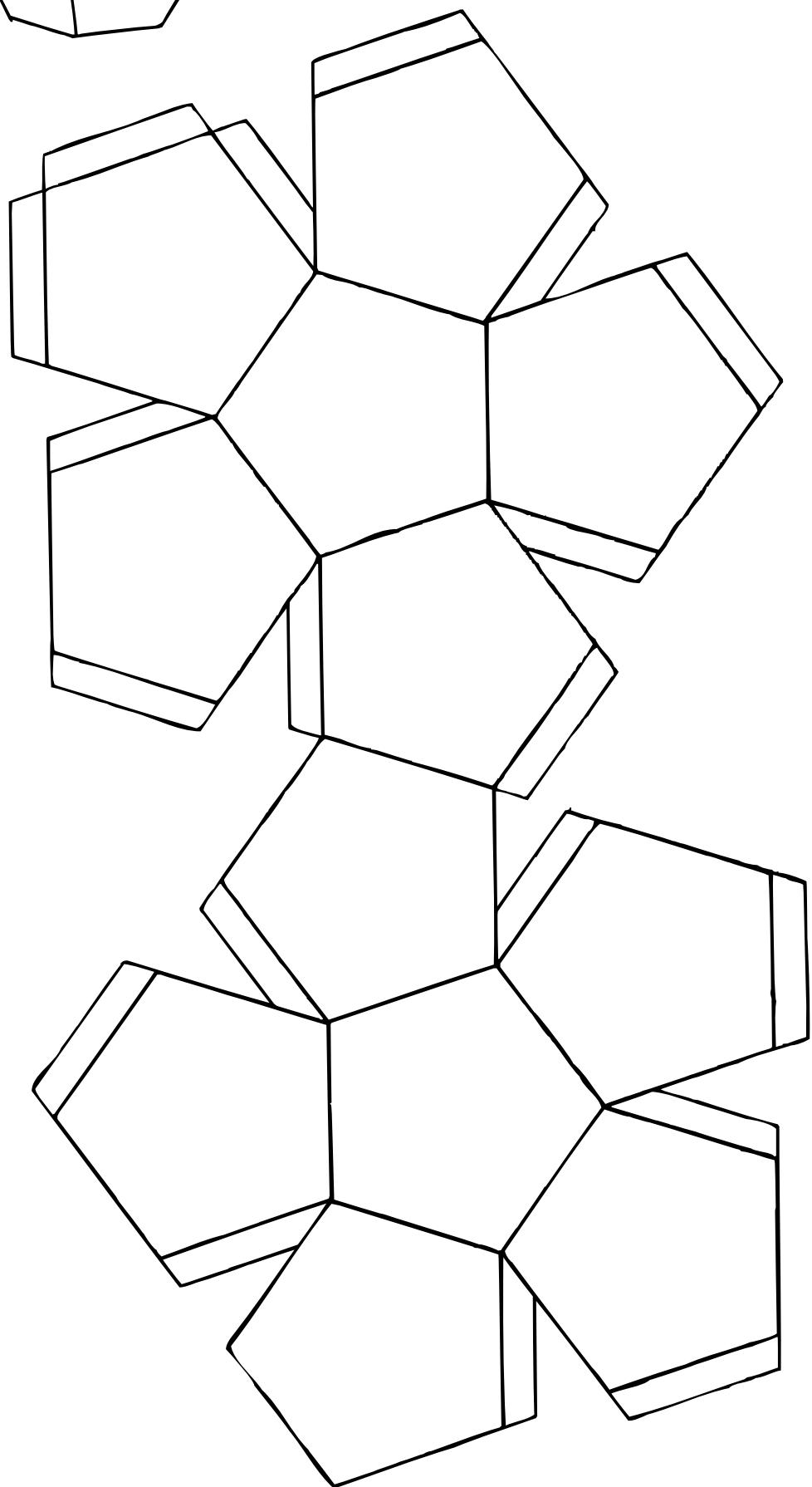


# THE GREAT RHOMBICUBOCTAHEDRON





# DODECAHEDRON



# WHIZZ-KIDS WORKSHEET!

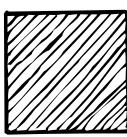
## NIFTY NUMBERS

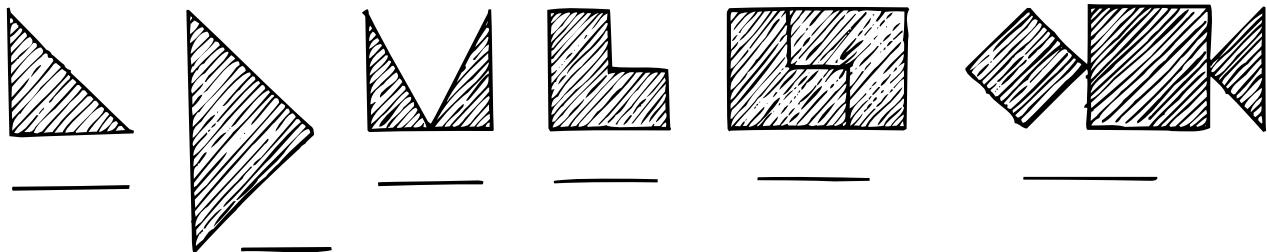
$$\begin{array}{lcl} 19 - 6 = \underline{\quad} & 14 \times 5 = \underline{\quad} \\ 3 + 19 = \underline{\quad} & 9 \times 9 = \underline{\quad} \\ 20 - 14 = \underline{\quad} & 15 + 8 = \underline{\quad} \\ 4 \times 13 = \underline{\quad} & 26 \div 2 = \underline{\quad} \\ 55 \div 5 = \underline{\quad} & 20 \times 5 = \underline{\quad} \\ 104 - 10 = \underline{\quad} & 106 + 8 = \underline{\quad} \\ 3 \times 90 = \underline{\quad} & 100 \div 10 = \underline{\quad} \\ 210 \div 7 = \underline{\quad} & 30 \times 5 = \underline{\quad} \\ 28 \div 2 = \underline{\quad} & 20 \times 2 = \underline{\quad} \\ 18 + 27 = \underline{\quad} & 18 + 15 = \underline{\quad} \end{array}$$

## VISCOUS VARIABLES

$$\begin{array}{l} y + 2y + 5y = \underline{\quad} \\ 5c + 3c + 8c = \underline{\quad} \\ 9d - 8d = \underline{\quad} \\ 5p + 2p + 8p = \underline{\quad} \\ 10e + 5e - 3e = \underline{\quad} \\ 2f + 20f - 6f = \underline{\quad} \\ 2g . 5 = \underline{\quad} \\ 3x . 4x = \underline{\quad} \\ 3y \div 3y = \underline{\quad} \\ 8y \div 4 = \underline{\quad} \end{array}$$

## RELATIVE RELATIONS

IF  = 12, what is the value of...



NUMBER OF MISTAKES \_\_\_\_\_

## TELLING TABLES

$$\begin{array}{lcl} 11 \times 3 = \underline{\quad} \\ 11 \times 7 = \underline{\quad} \\ 11 \times 9 = \underline{\quad} \\ 11 \times 11 = \underline{\quad} \\ 11 \times 5 = \underline{\quad} \\ 11 \times 8 = \underline{\quad} \\ 11 \times 10 = \underline{\quad} \\ 11 \times 12 = \underline{\quad} \\ 11 \times 4 = \underline{\quad} \\ 11 \times 6 = \underline{\quad} \end{array}$$



## MIGHTY METRICS

20 MINUTES AFTER 10.55 AM \_\_\_\_\_  
 WHAT IS HALF A CIRCLE CALLED  
 \_\_\_\_\_  
 DIAMETER = 11CM. RADIUS = \_\_\_\_\_  
 100 YEARS = \_\_\_\_\_ DECADES  
 HOW MANY MINUTES BETWEEN  
 2.35 PM AND 3.20 PM \_\_\_\_\_  
 MINUTES IN 4 HOURS \_\_\_\_\_  
 10 LITRES OF PETROL AT \$1.10  
 PER LITRE COSTS \_\_\_\_\_

# PARTY TIME



ICOSAHEDRON	CONE	CYLINDER	SPHERE	CUBE	ICOSAHEDRON	CYLINDER	PYRAMID	DODECAHEDRON	CYLINDER	PYRAMID
-------------	------	----------	--------	------	-------------	----------	---------	--------------	----------	---------