

Year 9 - Worksheet 1

Simplify these expressions:

1. $x \times x =$ _____
2. $3 \times 2x =$ _____
3. $3x \times 4x =$ _____
4. $3x \times 4y =$ _____
5. $3x \times 4y \times 2t =$ _____
6. $x \times y =$ _____
7. $y \times x =$ _____
8. $x \times y \times r =$ _____
9. $3x \times 5y =$ _____
10. $3x \times 4y \times 10z =$ _____

LOOK!



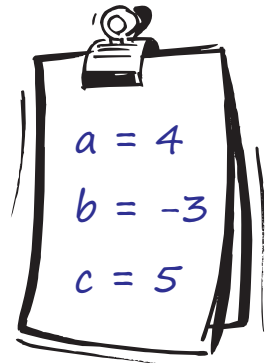
Three boys ran in a race.
Their total time was 24 minutes.
Bill ran 3 minutes quicker than Peter.
Michael ran 3 times quicker than Bill.
Find the race times of each boy.

Simplify these expressions:

1. $a + a$
= _____
2. $a + a + a$
= _____
3. $2a + 3a$
= _____
4. $3a - 2a$
= _____
5. $4a + 3a$
= _____
6. $3a + 2b + 2a$
= _____
7. $3a + 2b + a + 4b$
= _____
8. $5a - 3b - a + 2b$
= _____
9. $4a - 3b + 2a - 4b$
= _____
10. $6a - 3b - 3a - 5b$
= _____

Substitute the values into the expressions.

1. $c + b$ _____
2. $a + b - 2c$ _____
3. $4b$ _____
4. abc _____
5. $b - c$ _____
6. $2a + 3b$ _____
7. $a - b$ _____
8. $5a - 2b$ _____
9. $ab - bc$ _____
10. $ac - b$ _____



TEN QUICK QUESTIONS

Write the next 3 numbers in the sequences.

1. 2, 4, 6, 8, _____, _____, _____
2. 7, 10, 13, 16 _____, _____, _____
3. 21, 27, 33, 39 _____, _____, _____
4. 2, 4, 8, 16 _____, _____, _____
5. Simplify $a + 2a + 3a$ _____
6. Simplify $5a - 2a$ _____
7. Simplify $2a \times a$ _____
8. Substitute $a = 2$ into $3a$ and evaluate.

9. Simplify $2a + 3b + 2a$ _____
10. Work out $2(a + 3b)$ given that $a = 4$, $b = 2$.

