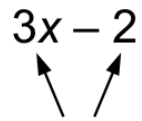
Year 6 Transition Algebra Work - due

Question 1 - (1 marks available)

We can describe $3x - 2$ as an expression.

How can we describe the parts of the expression that the arrows point to?



Question 2 - (2 marks available)

Wayne charges the following for repairing washing machines:

£28 call-out charge + £16 for each half-hour he spends on the repair

What will the total cost be for a repair which takes one and a half hours?

Question 3 - (1 marks available)

If I was asked to think of a number and multiply it by 2, I could write this algebraically as $2x$.

Write the following algebraically, using x as your unknown.

"I think of a number, multiply it by 3 and add 1 to the result."

Question 4 - (1 marks available)

If I was asked to think of a number and multiply it by 2, I could write this algebraically as $2x$.

Write the following algebraically, using x as your unknown.

"I think of a number, add 3 to it and multiply the result by 7."

Question 5 - (3 marks available)

Simplify these expressions

a) $2a + 5a$

b) $12x - 3x$

c) $3p + 2p - p$

Question 6 - (3 marks available)

Simplify these expressions

a) $5 \times x$

b) $6 \times x \times y$

c) $2 \times x \times 3 \times y$

Question 7 - (2 marks available)

Simplify fully

a) $x^8 \div x^2$

b) $y^5 \div y^4$

Question 8 - (1 marks available)

Expand $3(x + 4)$

Question 9 - (1 marks available)

Factorise $8x + 12$

Question 10 - (3 marks available)

If $x = 6$, find the value of

a) $x + 4$

b) $3x$

c) $\frac{x}{2}$

Question 11 - (1 marks available)

Write the first four terms of this sequence

Start at 3 and add 4

, , ,

Question 12 - (4 marks available)

For each sequence, find the **first 4 terms** and the **10th term**.

a) $n + 5$

, , , , . . . ,

b) $2n - 1$

, , , , . . . ,

Question 13 - (1 marks available)

Find the *n*th term of this number sequence

2, 4, 6, 8, . . .