

Shuttle: Substitution

ANSWERS

Teacher copy. Every answer, and which pair holds which question.

Round 1

Q1

Work out the value of $3a + 2b$ when $a = 5$ and $b = 4$.

Answer 23

Pass your answer to pair B

Q2

$$P = 2l + 2w$$

Find P when $l = 23$ and $w = 9$.

Write pair A's answer to question 1 in the pink box.

Answer 64

Pass your answer to pair A

Q3

$$y = \frac{x}{4} + 9$$

Find y when $x = 64$.

Write pair B's answer to question 2 in the pink box.

Answer 25

Pass your answer to pair B

Q4

A temperature of C degrees Celsius is F degrees Fahrenheit, where $F = \frac{9C}{5} + 32$.

Find F when $C = 25$.

Write pair A's answer to question 3 in the pink box.

Answer 77

Hand your answer to the teacher

Round 2

Q1

Work out the value of $4p - q$ when $p = -2$ and $q = -15$.

Answer 7

Pass your answer to pair B

Q2

Work out the value of $x^2 + 3x$ when

$$x = 7$$

Write pair A's answer to question 1 in the pink box.

Answer 70

Pass your answer to pair A

Q3

$$s = \frac{(u + v)t}{2}$$

Find s when $u = 10$, $v = 70$ and $t = 3$.

Write pair B's answer to question 2 in the pink box.

Answer 120

Pass your answer to pair B

Q4

Work out the value of $\sqrt{m + 24}$ when

$$m = 120$$

Write pair A's answer to question 3 in the pink box.

Answer 12

Hand your answer to the teacher

Round 3

Q1

Kayak hire costs C pounds for h hours, where $C = 30 + 12h$. Find C when $h = 5$.

Answer 90

Pass your answer to pair B

Q2

$$a = 2b - 3c$$

Find a when $b = 90$ and $c = 25$.

Write pair A's answer to question 1 in the pink box.

Answer 105

Pass your answer to pair A

Q3

Work out the value of $\frac{m + 15}{m - 75}$ when

$$m = 105$$

Write pair B's answer to question 2 in the pink box.

Answer 4

Pass your answer to pair B

Q4

Work out the value of $2t^3 - 5t$ when

$$t = 4$$

Write pair A's answer to question 3 in the pink box.

Answer 108

Hand your answer to the teacher

The Maths Habit