

Formulae

ANSWERS

Calculator | 30 minutes | Total marks: 22

Name _____ Class _____

1 Total cost in pounds = number of tickets $\times$ 8

(a) Work out the total cost of 5 tickets.

Answer £ 40 (1) [1 mark]

(b) The total cost is £72

Work out the number of tickets.

Answer 9 (1) [1 mark]

2 $x = 3$ $y = 5$

Work out the value of

(a) $x + y$

Answer 8 (1) [1 mark]

(b) $4x$

Answer 12 (1) [1 mark]

(c) $2x + y$

Answer 11 (1) [1 mark]

(d) xy

Answer 15 (1) [1 mark]

(e) y^2

Answer 25 (1) [1 mark]

(f) $3y - x$

Answer 12 (1) [1 mark]

3

$$a = -2$$

Work out the value of

(a) $a + 7$

Answer 5 (1) [1 mark]

(b) $3a$

Answer -6 (1) [1 mark]

(c) a^2

Answer 4 (1) [1 mark]

4

$$P = 2l + 2w$$

Work out the value of P when $l = 6$ and $w = 4$

$$12 + 8 \text{ (1)}$$

$P =$ 20 (1) [2 marks]

5

A taxi charges £5 plus £2 for each mile.

$$C = 5 + 2m$$

(a) Work out the value of C when $m = 6$

$$5 + 12 \text{ (1)}$$

$C =$ 17 (1) [2 marks]

(b) Work out the value of m when $C = 25$

$$2m = 20 \text{ (1)}$$

$m =$ 10 (1) [2 marks]

6

(a) Write an expression for 5 more than n .Answer $n + 5$ (1)

[1 mark]

(b) Write an expression for 3 lots of n .Answer $3n$ (1)

[1 mark]

(c) Cakes cost £2 each.

Write a formula for the total cost, £ T , of c cakes.Answer $T = 2c$ (1)

[1 mark]

7

(a) Make x the subject of $y = x + 4$ $x = y - 4$ (1)

[1 mark]

(b) Make x the subject of $y = 5x$ $x = \frac{y}{5}$ (1)

[1 mark]

Question	Topic	RAG
1	I can use a formula written in words	
2	I can substitute into expressions	
3	I can substitute a negative number	
4	I can use a formula	
5	I can use a formula and work backwards	
6	I can write expressions and a formula	
7	I can change the subject of a simple formula	