

Name _____

- 1 Here is a function machine.



Complete the sentences.

When the input is 7, the output is 12

When the input is 2, the output is 7

- 2 If $\star = 6$ and $\text{😊} = 8$, find the total of each row and column.

\star	\star	😊	20
\star	\heartsuit	😊	26
\heartsuit	\heartsuit	😊	32
24	30	24	

3 marks for 4 correct.

2 marks for 3 correct.

1 mark for 2 correct.



2 marks



3 marks

- 3 c and d represent positive integer variables.

$$c + d = 5$$

Complete the table to show possible values of c and d .

c	d
1	4
2	3
3	2
4	1

Accept 0 and 5 or 5 and 0

1 mark for at least 2 correct combinations.



2 marks

- 4 Solve the equations.

$$x + 3 = 9$$

$$x = 6$$



1 mark

$$b - 3 = 9$$

$$b = 12$$



1 mark

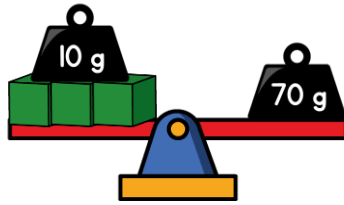
$$3c = 12$$

$$c = 4$$



1 mark

5 Hassan is balancing objects.



What is the mass of one of the cubes?

1 mark for working out the mass of 3 cubes is 60 g.

20 g

2 marks

6 If $p = 7$, what is the value of $2p + 9$?

23

1 mark

7 Nina uses a bar model to solve $3x + 5 = 38$



Solve the equation $3x + 5 = 38$

1 mark for $3x = 33$

$x = 11$

2 marks

8 Solve $10y - 3 = 77$

1 mark for $10y = 80$

$y = 8$

2 marks

9 Dexter is selling ice-creams.

He uses this formula to work out the price.

$$\text{Price} = \text{£}1.50s + \text{£}0.40t$$

Where s is the number of scoops and t is the number of toppings.

Work out the cost of an ice-cream with 2 scoops and 3 toppings.

£ 4.20

1 mark

Libby buys an ice-cream that costs £2.30

How many scoops does she have?

1

1 mark

How many toppings does she have?

2

1 mark

Circle how confident you feel with algebra.

1

2

3

4

5

Not
confident

Very
confident