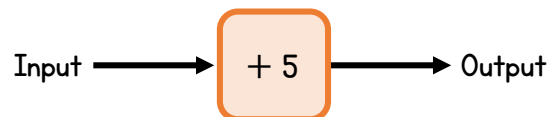


Name _____

- 1 Here is a function machine.



Complete the sentences.

When the input is 7, the output is _____

When the input is _____, the output is 7

2 marks

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

$\star$	$\star$	😊	
$\star$	$\heartsuit$	😊	26
$\heartsuit$	$\heartsuit$	😊	
	30		

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

2 marks

- 4 Solve the equations.

$$x + 3 = 9$$

$$x = \underline{\hspace{2cm}}$$

$$b - 3 = 9$$

$$b = \underline{\hspace{2cm}}$$

$$3c = 12$$

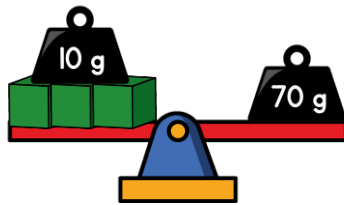
$$c = \underline{\hspace{2cm}}$$

1 mark

1 mark

1 mark

- 5 Hassan is balancing objects.



What is the mass of one of the cubes?

_____ g

2 marks

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

1 mark

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



Solve the equation $3x + 5 = 38$

$x =$ _____

2 marks

- 8 Solve $10y - 3 = 77$

$y =$ _____

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.

£ _____

1 mark

Libby buys an ice-cream that costs £2.30

How many scoops does she have?

1 mark

How many toppings does she have?

1 mark

Circle how confident you feel with algebra.

1

2

3

4

5

Not
confident

Very
confident