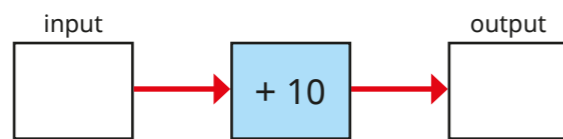


Name: \_\_\_\_\_

- 1 Here is a function machine.



Complete the sentences.

When the input is 7, the output is










1 mark

When the input is , the output is 50

1 mark

- 2 Work out the total of each row and column.

 = 6     = 8

			
			26
			
	30		

3 marks

- 3  $a$  and  $b$  are both whole numbers.

$$a + b = 4$$

Complete the table to show all the possible values of  $a$  and  $b$ .

$a$	$b$

2 marks

- 4 Solve the equations.

$$x + 5 = 7$$

$$x = \text{$$

1 mark

$$p - 5 = 7$$

$$p = \text{$$

1 mark

$$5c = 15$$

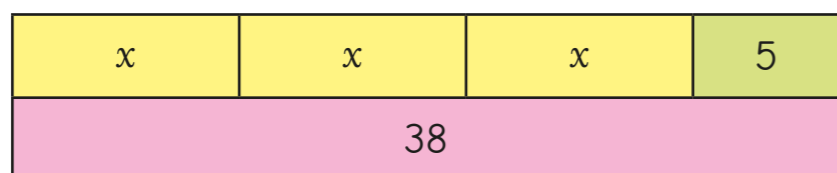
$$c = \text{$$

1 mark

5 If  $p = 7$ , what is the value of  $2p + 8$ ?

1 mark

6 Mo uses a bar model to represent  $3x + 5 = 38$



Solve the equation  $3x + 5 = 38$

$x =$

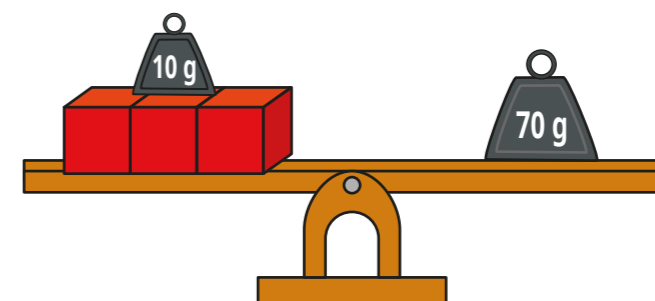
2 marks

7 Solve  $10y - 3 = 77$

$y =$

2 marks

8 Here is a set of scales.



The cubes are identical.

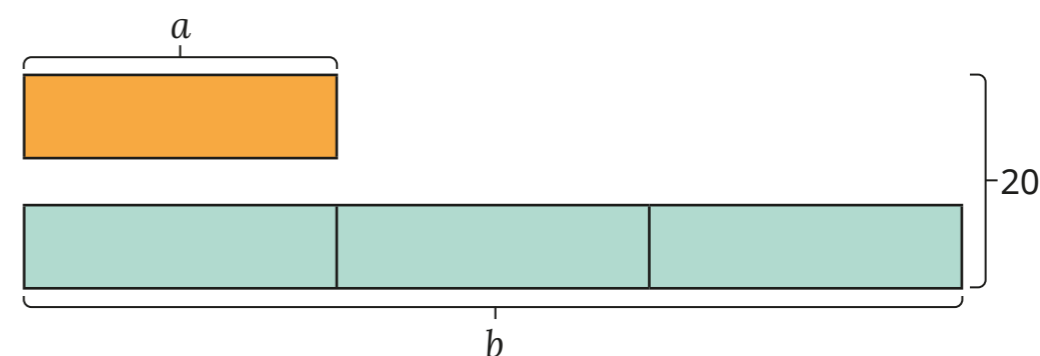
What is the mass of one cube?

 g

2 marks

9  $a + b = 20$

$b$  is 3 times the size of  $a$ .



Work out the values of  $a$  and  $b$ .

$a =$

$b =$

2 marks

Work out the value of  $5a + 2b$ .

1 mark