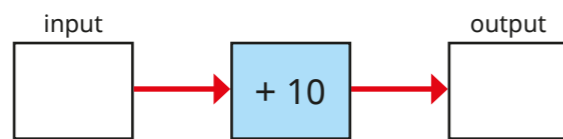


Name: _____

- 1 Here is a function machine.



Complete the sentences.

When the input is 11, the output is

1 mark

When the input is , the output is 30

1 mark

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

= 5 = 12

			24
	19		

3 marks

- 3 a and b are both whole numbers.

$$a + b = 5$$

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

a	b

2 marks

- 4 Solve the equations.

$$x + 8 = 11$$

$$x = \text{input box}$$

1 mark

$$p - 8 = 11$$

$$p = \text{input box}$$

1 mark

$$10c = 140$$

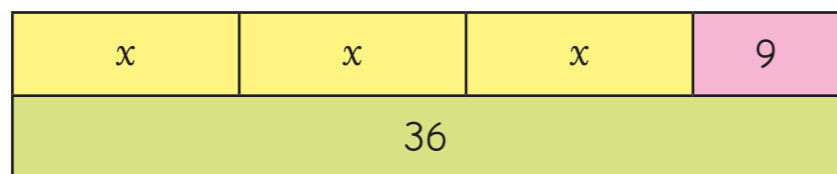
$$c = \text{input box}$$

1 mark

5 If $p = 7$, what is the value of $3p + 5$?

1 mark

6 Mo uses a bar model to represent $3x + 9 = 36$



Solve the equation $3x + 9 = 36$

$x =$

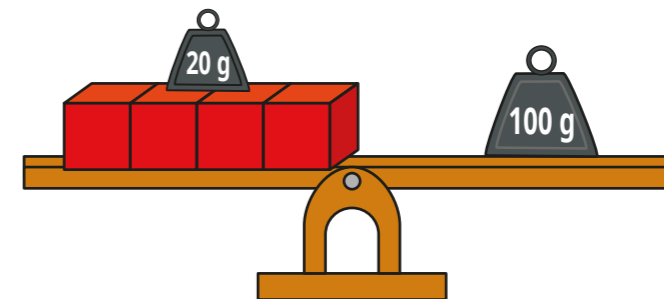
2 marks

7 Solve $5y - 8 = 82$

$y =$

2 marks

8 Here is a set of scales.



The cubes are identical.

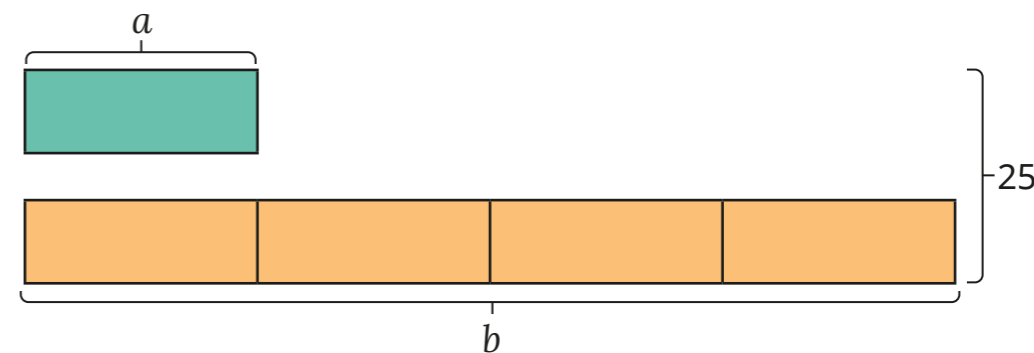
What is the mass of one cube?

 g

2 marks

9 $a + b = 25$

b is 4 times the size of a .



Work out the values of a and b .

$a =$

$b =$

2 marks

Work out the value of $4a + 4b$.

1 mark