

6

ALGEBRA

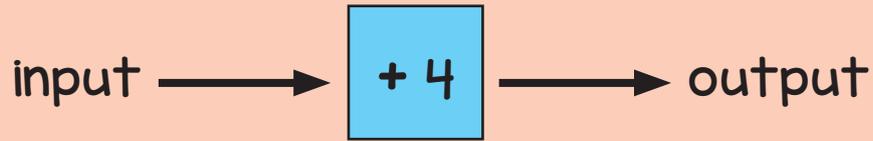
White
Rose
Maths



From White Rose Maths schemes for Year 6 Spring Term

BLOCK 3 - ALGEBRA

1 Here is a function machine.



Complete the sentences.

When the input is 8, the output is

When the input is

, the output is 9

2 If  = 5 and  = 8, find the total of each row and column.

			
			19
			
	17		

3 c and d represent positive integer variables.

$$c + d = 7$$

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

c	d

Here is another equation.

$$x + y = 10$$

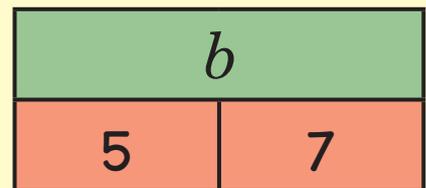
If $x = 4.5$, what is the value of y ?

- 4 Solve the equations to find the unknown value.
Use the bar models to help you.

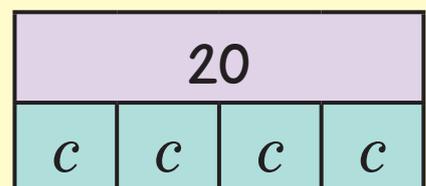
$$x + 4 = 7$$



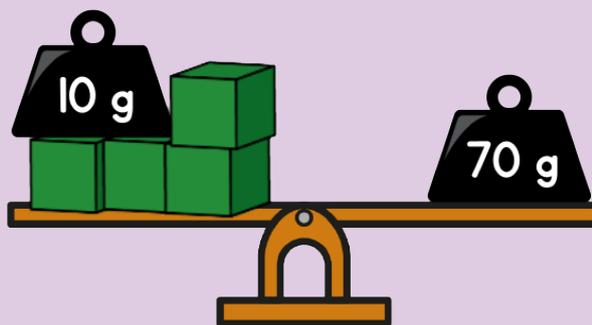
$$b - 5 = 7$$



$$4c = 20$$



- 5 Kim is balancing objects.

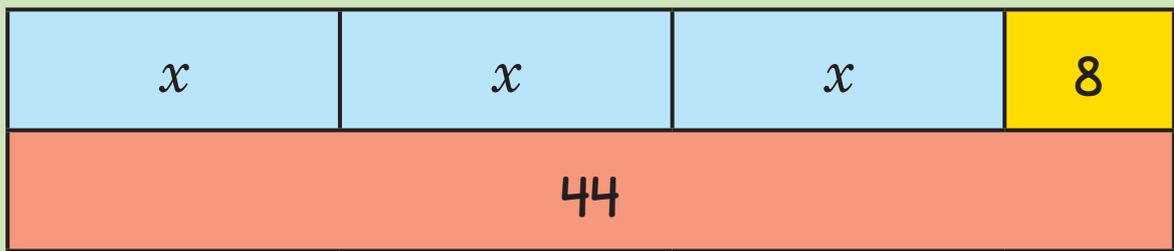


What is the mass of one of the cubes?

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

- 7 Huan draws a bar model to help him solve

$$3x + 8 = 44$$



Solve the equation $3x + 8 = 44$

- 8 Solve $10y - 4 = 86$

9

Dexter is selling ice creams.

He uses this formula to work out the price where s is the number of scoops and t is the number of toppings.

$$\text{price} = \pounds 1.50s + \pounds 0.60t$$



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

Dani buys an ice cream that costs $\pounds 2.70$

How many scoops does she have?

How many toppings does she have?

Answers



- 1 When the input is 8, the output is 12
When the input is 5, the output is 9

2

			18
			19
			20
16	17	24	

3

<i>c</i>	<i>d</i>
1	6
2	5
3	4
4	3
5	2
6	1

$$y = 5.5$$

- 4 $x = 3$
 $b = 12$
 $c = 5$

- 5 15 g

6 23

7 $x = 12$

8 $y = 9$

9 £5.70

1 scoop, 2 toppings