

IAL: to use simple formulae

<https://www.bbc.co.uk/bitesize/topics/zghp34j/articles/z2qmrwx>
<https://www.bbc.co.uk/bitesize/clips/z3bcd2p>

A

$$1) y + 19 = 25$$

$$30 - z = 16$$

Calculate:

$$y + z = \boxed{}$$

$$z - y = \boxed{}$$

$$z \text{ multiplied by } y = \boxed{}$$

$$2) 3a = 15$$

This means $3 \times a = 15$ so a must = 5

Find the values of b for each of these:

$$5b = 45 \quad b = \boxed{}$$

$$b + 83 = 101 \quad b = \boxed{}$$

$$72 \div b = 12 \quad b = \boxed{}$$

$$13 \times b = 104 \quad b = \boxed{}$$

3) Calculate the value of c :

$$30 = 2c + 20 \quad c = \boxed{}$$

$$100 = 500 \div c \quad c = \boxed{}$$

B

$6e + 7 = 43$	$e =$
$0.5 \times 9 = f$	$f =$
$17 = 4g + 1$	$g =$
$2h - 5 = 5$	$h =$
$27 = 6i - 27$	$i =$
$60 + 4j = 10^2$	$j =$

C

Find the missing values and complete the table below:

a	$4a$	$4a + 2$
12		
	36	
		102

Find the value of a and b :

$$2a + a^2 = 3.5 \times 10 = 70 \div b$$

IAL: to use simple formulae



A

Ernie starts a business selling multi-packs of hand sanitiser.

This is the formula for the cost to the customer:

cost = number of bottles \times \pounds 3 + 50p for the bag.

So if you bought 3 bottles , it would be $3 \times \pounds 3 = \pounds 9$ and then another 50p for the bag.

Total cost for 3 bottles = $\pounds 9.50$

Use the formula above to calculate:

How much would it cost to buy 9 bottles of Ernie's hand sanitiser?

£

**Gumbo spent $\pounds 39.50$ on Ernie's products.
How many bottles did he get?**

bottles

B



This is the formula for how long it takes to cook a roast chicken:

$$\text{time} = 20 \text{ minutes per kg} + 25 \text{ minutes}$$

Calculate how long it would take to cook a chicken that weighs 6kg.

If it takes Kylie 3 hours 5 mins to cook her chicken. How heavy was it?

C



The cost to hire the A-Team van (if you can find it) is:

$$\text{cost} = \text{£}150 \times \text{number of hours} + \text{£}85 \text{ booking fee}$$

How much would it cost to hire it for 320 minutes?

IAL: to express missing numbers algebraically

- Find the value of the circle in each of the following problems. It is worth a different value in each question.

$$\begin{array}{l}
 \boxed{} = 5 \qquad \text{Hexagon} = 8 \\
 \boxed{} + \text{Hexagon} + \text{Hexagon} + \text{Circle} = 27 \\
 \text{Hexagon} + \text{Hexagon} + \text{Circle} + \text{Circle} = 30 \\
 \text{Circle} + \text{Circle} + \text{Circle} + \text{Circle} + \boxed{} = 33
 \end{array}$$

Can you write each of the number sentences above algebraically?