



1) What is the value of n in the following equations:

a) $n + 6 + 8 = 24$

$n =$

b) $3n = 45$

$n =$

c) $2n - 4 = 14$

$n =$

2) Work out the value of a

$$a^3 = b^2$$

$a =$

3) Write the formula to find the area of a rectangle and give an example of how it is used:

4) A group of friends go Raspberry picking. This sign is displayed when they arrive at the till to help people work out how much the raspberries cost:

£1.20 per 100g + 25p for the box

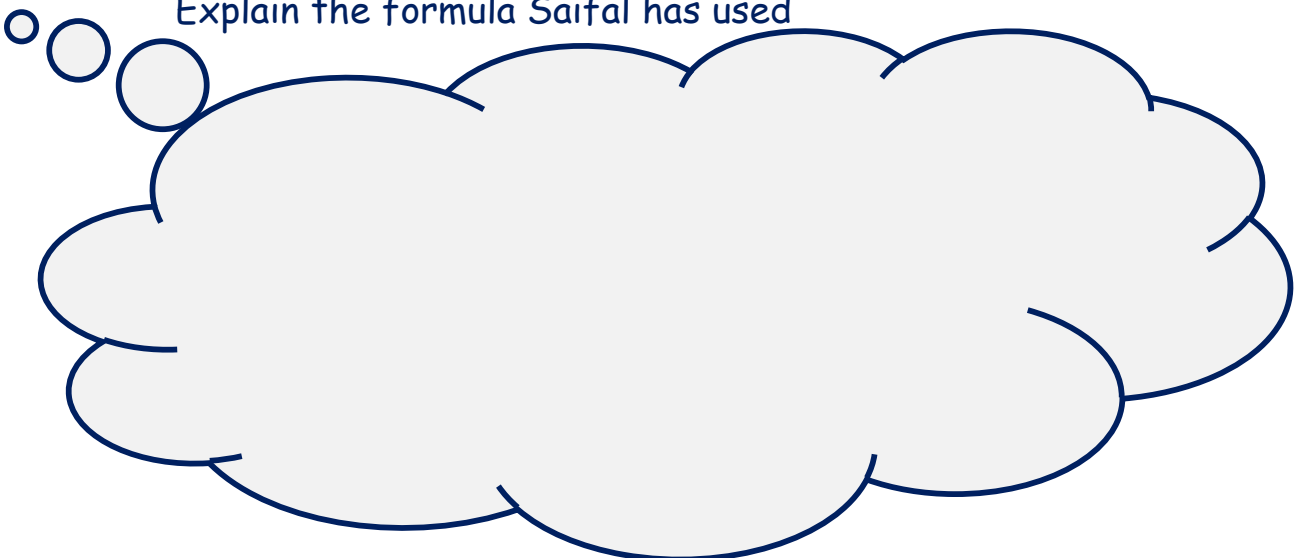
a) Tasha picks 425grams of raspberries. How much will it cost her?

b) Tom spends £3.25. How many grams of raspberries did he buy?

c) Saifal buys 300g of raspberries. He said I can write this down like this:

£1.20 \times 3r + 25p

Explain the formula Saifal has used



5) Continue number sequence and describe the pattern:

120, 60, 30, 15, ,

6) Natalia uses this formula to write a sequence of numbers. She starts with the number 2.

$$n \times 2 + 1$$

For example: $2 \times 2 + 1 = 5$

Work out what the 5th number in the sequence is?

7) Match the equations to the correct value of n.

$$n = 2$$

$$n = 3$$

$$n = 4$$

$$n = 5$$

$$\begin{aligned} 3n + m &= 11 \\ m + 2 &= 7 \end{aligned}$$

$$\begin{aligned} 5p - n &= 10 \\ p + p &= 6 \end{aligned}$$

$$\begin{aligned} w \div n &= 4 \\ w^2 &= 144 \end{aligned}$$

8) Zain visits the sweet shop. He has 24p to spend. Here are the prices of different sweets.



red lace 5p

L



toffee 8p

T



chocolate stick 10p

S



chocolate coin 7p

C

Suggest a combination of sweets Zain could buy using the whole of his 24 pence. Write this as an algebraic equation using the symbols suggested.

9) Use any 2 digits between the numbers 3 and 9 to make this number sentence correct:

$$21 + \square = 30 - \square$$

10) Below is a product pyramid. Find the missing numbers:

