

Name: _____

Exam Style Questions

Fractions: finding the original quantity



Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

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Video 132



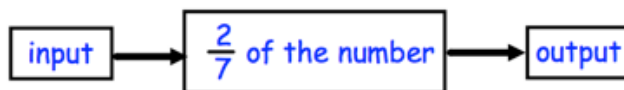
1. I am thinking of a number.
Three-quarters of the number is 12.
What is the number?

16
.....
(2)

2. $\frac{4}{5}$ of y is 20.
Find the size of y .

25
.....
(2)

3.



- (a) Work out the output if the input is 28.

8
.....
(2)

- (b) Work out the input if the output is 14

$x = 49$
.....
(2)

4. There are red sweets and yellow sweets in a bag.
 $\frac{5}{6}$ of the sweets are yellow.

There are 20 yellow sweets in the bag.

Work out how many sweets in total are in the bag.

$$\begin{aligned}\frac{5}{6}x &= 20 \\ 5x &= 120 \\ x &= 24\end{aligned}$$

$$\begin{array}{r} 24 \\ \hline \end{array} \quad (2)$$

5. Gavin wins some money in a raffle.
Gavin gives $\frac{2}{3}$ of the money to charity.
He saves the rest of the money.

Gavin gives £240 to charity.
How much money does Gavin save?

$$\begin{aligned}\frac{2}{3}x &= 240 \\ 2x &= 720 \\ x &= 360\end{aligned}$$

$$\begin{array}{r} 360 \\ - 240 \\ \hline \end{array}$$

$$\begin{array}{r} 120 \\ \hline \end{array} \quad (2)$$

6. I'm thinking of a number **18**
A $\frac{1}{3}$ of a number is 6.

Work out $\frac{1}{2}$ of the number.

$$\begin{array}{r} 9 \\ \hline \end{array} \quad (2)$$

7. I'm thinking of a number
A two-fifths of a number is 20.

$$20 \div 2 = 10$$
$$10 \times 5 = 50$$

Work out $2\frac{1}{2}$ times the number.

$$2.5 \times 50 =$$

$$\underline{125}$$

(3)

8. Alison is selling DVDs of a school ski trip.
She has 300 DVDs that cost £2 each to make. £600

Alison sells 250 DVDs for the full price. £9

She then reduces the price of each DVD by $\frac{1}{3}$.
Alison sells the remaining DVDs for £6 each.

Work out how much profit Alison makes.

$$250 \times 9 = \pounds 2250$$
$$50 \times 6 = \pounds 300$$

$$\pounds 2550$$

$$\pounds 2550 - \pounds 600$$

$$\underline{\pounds 1950}$$

(5)