Percentages as fractions of 100

Write these fractions as percentages.

$\frac{7}{10}$ = ____ $\frac{1}{5}$ = ____

Write this percentage as a fraction.

65% = ____

Write these fractions as percentages.

$\frac{2}{5}$ = ____	$\frac{3}{10}$ = ____	$\frac{1}{2}$ = ____
$\frac{9}{10}$ = ____	$\frac{3}{5}$ = ____	$\frac{4}{5}$ = ____
$\frac{1}{10}$ = ____	$\frac{1}{4}$ = ____	$\frac{3}{4}$ = ____

Now try these.

$\frac{3}{100}$ = ____	$\frac{7}{100}$ = ____	$\frac{9}{100}$ = ____
$\frac{23}{100}$ = ____	$\frac{47}{100}$ = ____	$\frac{93}{100}$ = ____

Change these percentages to fractions. Remember that you may need to simplify.

20% = ____	45% = ____	55% = ____
12% = ____	35% = ____	60% = ____

Work out the answer to each calculation.

Cyril ate $\frac{2}{5}$ of a box of chocolates. What percentage did he have left?

Tasmin put a 10% deposit on a dress in the sale. What fraction of the price did she still have to pay?

Working out percentages

Find 50% of these numbers.

12 ____ 42 ____ 22 ____

Find 25% of these amounts.

£8 ____ 72 km ____ 24 g ____

Find 50% of these numbers.

68 ____	46 ____	18 ____
36 ____	100 ____	80 ____

Find 25% of these numbers.

12 ____	48 ____	36 ____
20 ____	4 ____	40 ____

Find 75% of these amounts.

£28.00 ____	12 cm ____	100 l ____
44 km ____	£60.00 ____	16 m ____

Find 10% of these amounts.

£200.00 ____	70 m ____	30 cm ____
24 l ____	£37.00 ____	48 g ____
62 km ____	27 cm ____	36 l ____

Write the answer in the box.

25% of a number is 12. What is the number?

10% of a number is 14. What is the number?

Mark spent 25% of his money. If he still has £60, how much did he spend?

Answers:

Percentages as fractions of 100

Write these fractions as percentages.

$\frac{7}{10}$ = 70% $\frac{1}{5}$ = 20%

Write this percentage as a fraction.

65% = $\frac{65}{100} = \frac{13}{20}$

Write these fractions as percentages.

$\frac{2}{5}$ = 40%	$\frac{3}{10}$ = 30%	$\frac{1}{2}$ = 50%
$\frac{9}{10}$ = 90%	$\frac{3}{5}$ = 60%	$\frac{4}{5}$ = 80%
$\frac{1}{10}$ = 10%	$\frac{1}{4}$ = 25%	$\frac{3}{4}$ = 75%

Now try these.

$\frac{3}{100}$ = 3%	$\frac{7}{100}$ = 7%	$\frac{9}{100}$ = 9%
$\frac{23}{100}$ = 23%	$\frac{47}{100}$ = 47%	$\frac{93}{100}$ = 93%

Change these percentages to fractions. Remember that you may need to simplify.

20% = $\frac{20}{100} = \frac{1}{5}$ 45% = $\frac{45}{100} = \frac{9}{20}$ 55% = $\frac{55}{100} = \frac{11}{20}$

12% = $\frac{12}{100} = \frac{3}{25}$ 35% = $\frac{35}{100} = \frac{7}{20}$ 60% = $\frac{60}{100} = \frac{3}{5}$

Work out the answer to each calculation.

Cyril ate $\frac{2}{5}$ of a box of chocolates. What percentage did he have left?

60%

$1 - \frac{2}{5} = \frac{3}{5}$

$\frac{3}{5} \times 100 = 60$

Tasmin put a 10% deposit on a dress in the sale. What fraction of the price did she still have to pay?

$\frac{9}{10}$

$100 - 10 = 90$

$\frac{90}{100} = \frac{9}{10}$

Children may need help to see that if $\frac{1}{10}$ is the same as 10%, then $\frac{1}{5}$ is equal to 20% because it is $\frac{2}{10}$. You may have to remind them that 1% is equal to $\frac{1}{100}$. Any number divided by 100 will be the same as the percentage of that number.

Working out percentages

Find 50% of these numbers.

12 6 42 21 22 11

Find 25% of these amounts.

£8 £2 72 km 18 km 24 g 6 g

Find 50% of these numbers.

68 34	46 23	18 9
36 18	100 50	80 40

Find 25% of these numbers.

12 3	48 12	36 9
20 5	4 1	40 10

Find 75% of these amounts.

£28.00 £21.00	12 cm 9 cm	100 l 75 l
44 km 33 km	£60.00 £45.00	16 m 12 m

Find 10% of these amounts.

£200.00	£20.00	70 m 7 m	30 cm 3 cm
24 l	2.4 l	£37.00 £3.70	48 g 4.8 g
62 km	6.2 km	27 cm 2.7 cm	36 l 3.6 l

Write the answer in the box.

25% of a number is 12. What is the number? 48

10% of a number is 14. What is the number? 140

Mark spent 25% of his money. If he still has £60, how much did he spend? £20

Children should be aware that 50% is equal to $\frac{1}{2}$; 25% is equal to $\frac{1}{4}$; 75% is equal to $\frac{3}{4}$; and 10% is equal to $\frac{1}{10}$. They may convert units, e.g., 27 mm is 10% of 27 cm. This shows that they are comfortable with both conversion and percentage sums.