



# Percentage of an Amount



REVISE THIS  
TOPIC

1 (a) Work out 10% of 720



$$720 \div 10$$

$$\begin{array}{r} 72 \\ \hline \end{array} \quad (1)$$

(b) Work out 50% of 120

$$120 \div 2$$

$$\begin{array}{r} 60 \\ \hline \end{array} \quad (1)$$

(c) Work out 1% of 800

$$800 \div 100$$

$$\begin{array}{r} 8 \\ \hline \end{array} \quad (1)$$

(d) Work out 25% of 44

$$44 \div 4$$

$$\begin{array}{r} 11 \\ \hline \end{array} \quad (1)$$

(e) Work out 10% of 35

$$35 \div 10$$

$$\begin{array}{r} 3.5 \\ \hline \end{array} \quad (1)$$

(f) Work out 50% of 11

$$11 \div 2$$

$$\begin{array}{r} 5.5 \\ \hline \end{array} \quad (1)$$

(Total for Question 1 is 6 marks)





2 (a) Work out 20% of 300

$$\begin{array}{l} \times 2 \left( \begin{array}{l} 10\% = 30 \\ 20\% = 60 \end{array} \right) \times 2 \end{array}$$

60

(2)

(b) Work out 5% of 260

$$\begin{array}{l} \div 2 \left( \begin{array}{l} 10\% = 26 \\ 5\% = 13 \end{array} \right) \div 2 \end{array}$$

13

(1)

(c) Work out 1% of 40

$$40 \div 100$$

0.4

(1)

(d) Work out 40% of 60

$$\begin{array}{l} \times 4 \left( \begin{array}{l} 10\% = 6 \\ 40\% = 24 \end{array} \right) \times 4 \end{array}$$

24

(2)

(e) Work out 15% of 180

$$\begin{array}{r} 10\% = 18 \\ + \quad 5\% = 9 \\ \hline 15\% = 27 \end{array}$$

27

(2)

(f) Work out 70% of 4100

$$\begin{array}{l} \times 7 \left( \begin{array}{l} 10\% = 410 \\ 70\% = 2870 \end{array} \right) \times 7 \end{array}$$

2870

(2)

(Total for Question 2 is 10 marks)





3 Work out 35% of 480



$$\begin{array}{r} 10\% = 48 \\ 10\% = 48 \\ 10\% = 48 \\ + 5\% = 24 \\ \hline 35\% = 168 \end{array}$$

168

(Total for Question 3 is 3 marks)

4 Work out 65% of 160



$$\begin{array}{r} 50\% = 80 \\ 10\% = 16 \\ + 5\% = 8 \\ \hline 65\% = 104 \end{array}$$

104

(Total for Question 4 is 3 marks)

5 Work out 22% of 30



$$\begin{array}{r} 10\% = 3.0 \\ 10\% = 3.0 \\ 1\% = 0.3 \\ + 1\% = 0.3 \\ \hline 22\% = 6.6 \end{array}$$

6.6

(Total for Question 5 is 3 marks)

6 Work out 95% of 6000



$$\begin{array}{r} 10\% = 600 \\ 5\% = 300 \\ 100\% = 6000 \\ - 5\% = 300 \\ \hline 95\% = 5700 \end{array}$$

5700

(Total for Question 6 is 3 marks)





7 Work out 0.5% of 280



$$\begin{array}{l} 1\% = 2.8 \\ \div 2 \quad \downarrow \quad \div 2 \\ 0.5\% = 1.4 \end{array}$$

1.4

(Total for Question 7 is 2 marks)

8 Work out 120% of 400



$$\begin{array}{r} 100\% = 400 \\ 10\% = 40 \\ + 10\% = 40 \\ \hline 120\% = 480 \end{array}$$

480

(Total for Question 8 is 3 marks)

9 Which is greater



10% of 95 or 15% of 64?

You must show all your working.

$$10\% = 9.5$$

$$\begin{array}{r} 10\% = 6.4 \\ + 5\% = 3.2 \\ \hline 15\% = 9.6 \end{array}$$

15% of 64

(Total for Question 9 is 4 marks)



10 (a) Work out 13% of 740 [calculator allowed]

$$740 \times 0.13$$

$$96.2$$

(2)

(b) Work out 9% of 550

$$550 \times 0.09$$

$$49.5$$

(2)

(c) Work out 63% of 808

$$808 \times 0.63$$

$$509.04$$

(2)

(d) Work out 87% of 14700

$$14700 \times 0.87$$

$$12789$$

(2)

(e) Work out 126% of 310

$$310 \times 1.26$$

$$390.6$$

(2)

(f) Work out 9.5% of 6010

$$6010 \times 0.095$$

$$570.95$$

(2)

(g) Work out 13.5% of 1180

$$1180 \times 0.135$$

$$159.3$$

(2)

(Total for Question 10 is 14 marks)



11 A bag contains 300 pencils.



20% of the pencils are red.

12% of the pencils are blue.

Work out how many more red pencils there are than blue pencils.

$$10\% = 30$$

$$20\% = 60$$

$$\begin{array}{r}
 10\% = 30 \\
 1\% = 3 \\
 + \quad 1\% = 3 \\
 \hline
 12\% = 36
 \end{array}$$

$$\begin{array}{r}
 5 \quad 1 \\
 60 \\
 - 36 \\
 \hline
 24
 \end{array}$$

24

(Total for Question 11 is 4 marks)

12 Stan receives £140 for his birthday.



He spends 35% of the money and saves the rest.

Work out how much money Stan **saves**.

$$10\% = 14$$

$$10\% = 14$$

$$10\% = 14$$

$$5\% = 7$$

$$35\% = 49$$

$$\begin{array}{r}
 140 \\
 - 49 \\
 \hline
 91
 \end{array}$$

£ 91

(Total for Question 12 is 3 marks)

13 Erica spends 2 hours revising.



She spends 40% of this time revising for maths.

Work out how many minutes Erica spends revising for maths.

$$2 \times 60 = 120 \text{ minutes}$$

$$\begin{array}{l}
 10\% = 12 \text{ mins} \\
 40\% = 48 \text{ mins}
 \end{array}$$

48

minutes

(Total for Question 13 is 3 marks)



- 14 A car's fuel tank can hold a total of 60 litres of fuel.  
Steve adds fuel to the fuel tank so that it is 80% full.



Each day Steve uses 15 litres of fuel to travel to work and back.  
Will Steve have enough fuel to travel to work and back for the next 3 days?  
You must show your working.

$$\begin{array}{l}
 \times 8 \swarrow 10\% = 6 \searrow \times 8 \\
 80\% = 48
 \end{array}$$

$$\begin{array}{l}
 15 \times 3 = 45 \\
 48 > 45
 \end{array}$$

Yes

(Total for Question 14 is 4 marks)

- 15 Zara wins £5000  
She keeps 70% for herself and shares the remainder equally between her two siblings.



Work out how much money each of Zara's siblings receives.

$$\begin{array}{l}
 \times 7 \swarrow 10\% = £500 \searrow \times 7 \\
 70\% = £3500 \\
 \text{(Zara)}
 \end{array}$$

$$\begin{array}{r}
 £5000 \\
 - 3500 \\
 \hline
 1500
 \end{array}$$

$$\begin{array}{r}
 0750 \\
 2 \overline{) 1500} \\
 \underline{10} \phantom{00} \\
 500 \\
 \underline{400} \phantom{0} \\
 100
 \end{array}$$

750

£ .....

(Total for Question 15 is 4 marks)

- 16 A theatre has 900 seats.  
Tickets for a show are sold for £3 each.  
One night the theatre sells enough tickets to fill 95% of their seats.

Work out how much money the theatre makes from ticket sales.

$$\begin{array}{l}
 10\% = 90 \\
 5\% = 45 \\
 \hline
 95\% = 855
 \end{array}$$

$$\begin{array}{r}
 855 \\
 \times 3 \\
 \hline
 2565
 \end{array}$$

2565

£ .....

(Total for Question 16 is 4 marks)



17 There are 850 students at a school.

On Monday the attendance was 94%

On Tuesday the attendance was 92%

Work out how many more students attended school on Monday than on Tuesday.

$$850 \times 0.94 = 799$$

$$850 \times 0.92 = 782$$

$$\begin{array}{r} 799 \\ - 782 \\ \hline 17 \end{array}$$

17

(Total for Question 17 is 3 marks)

18 A bag of flour weighs 2 kg.

A baker uses 18% of the bag for a recipe.

Work out how much flour is left in the bag.

Give your answer in **grams**.

$$2 \times 1000 = 2000\text{g}$$

$$2000 \times 0.18 = 360$$

$$2000 - 360 = 1640$$

1640

grams

(Total for Question 18 is 4 marks)

19 A rectangular wall measures 5 metres by 3 metres.

70% of the wall is going to be painted.

Work out the area of the wall that will be painted.

$$5 \times 3 = 15\text{m}^2$$

$$15 \times 0.7 = 10.5$$

10.5

m<sup>2</sup>

(Total for Question 19 is 3 marks)

