

Fractions, Decimals and Percentages 2

ANSWERS

No calculator | 30 minutes | Total marks: 30

Name Class

1 Work out

(a) 0.36×2.5

$$36 \times 25 = 900 \text{ (1)}$$

Answer 0.9 (1) [2 marks]

(b) $\frac{4.2}{0.07}$

$$420 \div 7 \text{ (1)}$$

Answer 60 (1) [2 marks]

2 (a) Write $\frac{2}{9}$ as a recurring decimal.

Answer 0.222... (1) [1 mark]

(b) Which one of these fractions gives a recurring decimal?

$$\frac{3}{8} \quad \frac{5}{6} \quad \frac{7}{20}$$

Answer $\frac{5}{6}$ (1) [1 mark]

(c) Write the recurring decimal $0.777...$ as a fraction.

$$10x - x = 7 \text{ (1)}$$

Answer $\frac{7}{9}$ (1) [2 marks]

3

Work out

Give each answer as a mixed number or a whole number.

(a) $2\frac{1}{4} + 1\frac{2}{3}$

$$\frac{9}{4} + \frac{5}{3} \text{ (1)}$$

$$\frac{27}{12} + \frac{20}{12} = \frac{47}{12} \text{ (1)}$$

Answer $3\frac{11}{12} \text{ (1)}$

[3 marks]

(b) $1\frac{1}{2} \times 2\frac{2}{3}$

$$\frac{3}{2} \times \frac{8}{3} \text{ (1)}$$

Answer 4 (1)

[2 marks]

(c) $3\frac{1}{3} \div 1\frac{1}{4}$

$$\frac{10}{3} \div \frac{5}{4} \text{ (1)}$$

$$\frac{10}{3} \times \frac{4}{5} = \frac{40}{15} \text{ (1)}$$

Answer $2\frac{2}{3} \text{ (1)}$

[3 marks]

4

Write these in order of size. Start with the smallest.

$$0.65 \quad \frac{5}{8} \quad 62\% \quad \frac{2}{3}$$

$$\frac{5}{8} = 0.625 \quad \frac{2}{3} = 0.666... \text{ (1)}$$

Answer $62\%, \frac{5}{8}, 0.65, \frac{2}{3} \text{ (1)}$

[2 marks]

5

(a) Increase £80 by 12%

$$80 \times 1.12 \text{ (1)}$$

Answer £ 89.60 (1)

[2 marks]

(b) Decrease 450 by 8%

$$450 \times 0.92 \text{ (1)}$$

Answer 414 (1)

[2 marks]

6

Noah invests £500 for 2 years.

The account pays 4% compound interest each year.

Work out the value of the investment after 2 years.

$$500 \times 1.04 = 520 \text{ (1)}$$

$$520 \times 1.04 \text{ (1)}$$

Answer £ 540.80 (1)

[3 marks]

7

In a sale, all prices are reduced by 20%

The sale price of a jacket is £36

Work out the price of the jacket before the sale.

$$80\% \text{ of the price} = 36 \text{ (1)}$$

$$36 \div 0.8 \text{ (1)}$$

Answer £ 45 (1)

[3 marks]

8

The price of a ticket goes up from £40 to £46

Work out the percentage increase.

$$\frac{6}{40} \times 100 \text{ (1)}$$

Answer 15 (1)

%

[2 marks]

Question	Topic	RAG
1	I can multiply and divide decimals by decimals	
2	I can work with recurring decimals	
3	I can calculate with mixed numbers	
4	I can order fractions, decimals and percentages	
5	I can use a multiplier to increase and decrease	
6	I can work out compound interest	
7	I can find the original amount after a percentage change	
8	I can work out a percentage change	