Percentages questions and answers

10 questions · 9 Core, 1 Extended · 4 non-calculator · worked answers

Name _____ Date _____ Score _____

- Original questions in the style of the Cambridge 0580 papers, each labelled Core or Extended and calculator or non-calculator. Try every question before you look at the answers.
- Worked answers start after the questions. Questions with marks come from our 0580 practice bank (M method, A accuracy, B independent marks).
- Online, with more practice: igcsemathrevision.com/igcse-frontend/0580/percentages-questions

Core: for everyone (Papers 1 and 3, and Extended Papers 2 and 4)

1. **Core · non-calculator · easy**

Work out 35% of 260.

2. **Core · calculator · easy**

Increase 450 by 12%.

3. **Core · non-calculator · easy · 2 marks**

Write 18 as a percentage of 72.

4. **Core · calculator · easy · 2 marks**

Increase 250 by 12%.

5. **Core · non-calculator · medium**

Write 48 as a percentage of 160.

6. **Core · calculator · medium**

The price of a bike falls from £250 to £215.
Work out the percentage decrease.

7. **Core · calculator · medium**

Ravi invests £1500 at 4% per year simple interest.
How much interest does he earn in 3 years?

8. **Core · non-calculator · medium · 2 marks**

A jacket costs £80. In a sale the price is reduced by 35%. Work out the sale price.

9. **Core · calculator · hard**

Lina invests £2000 at 3% per year compound interest.
Work out the value of her investment after 4 years. Give your answer to the nearest penny.

Extended: for Papers 2 and 4

10. **Extended · calculator · medium**

After a 15% increase, the price of a jacket is £92.
Work out the price before the increase.

Answers and worked solutions

Question 1

Answer: 91

1. $10\% = 26$, so $30\% = 78$. $5\% = 13$.
2. $35\% = 78 + 13 = 91$.

Question 2

Answer: 504

1. Multiplier $1 + 0.12 = 1.12$.
2. $450 \times 1.12 = 504$

Question 3 — 2 marks

Answer: 25%

M1 $\frac{18}{72} \times 100$

A1 25%

Question 4 — 2 marks

Answer: 280

M1 250×1.12 or $250 + 30$

A1 280

Question 5

Answer: 30%

1. $\frac{48}{160} = \frac{3}{10}$
2. $\frac{3}{10} = 30\%$

Question 6

Answer: 14%

1. Decrease $= 250 - 215 = 35$.
2. Percentage decrease $= \frac{35}{250} \times 100 = 14\%$.

Question 7

Answer: £180

1. Interest each year: $1500 \times 0.04 = 60$.
2. For 3 years: $60 \times 3 = 180$.

Question 8 — 2 marks

Answer: $£52$

M1 $0.35 \times 80 = 28$ or 0.65×80

A1 52

Question 9

Answer: £2251.02

1. Multiplier for one year: 1.03.
2. After 4 years: $2000 \times 1.03^4 = 2251.0162\ldots$

Question 10

Answer: £80

1. £92 is 115% of the original price.
2. Original $= 92 \div 1.15 = 80$.

More percentages practice with instant marking, notes and common mistakes: igcsemathrevision.com/igcse-frontend/0580/percentages-questions

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