Multiple choice questions - Percentage change and simple interest

Year: Year 9 · 10

Question 1 What is the multiplier for a 12% decrease?

- ◯ **A.** 0.12
- ◯ **B.** 1.12
- ◯ **C.** 0.88
- ◯ **D.** 0.8

Question 2 Increase £150 by 4%.

- ◯ **A.** £154
- ◯ **B.** £156
- ◯ **C.** £6
- ◯ **D.** £144

Question 3 A price rises from £20 to £25. What is the percentage increase?

- ◯ **A.** 5%
- ◯ **B.** 20%
- ◯ **C.** 25%
- ◯ **D.** 125%

Question 4 After a 10% increase, a price is £77. What was the original price?

- ◯ **A.** £69.30
- ◯ **B.** £70
- ◯ **C.** £84.70
- ◯ **D.** £67

Question 5 Simple interest on £400 at 5% for 2 years is:

- ◯ **A.** £20
- ◯ **B.** £40
- ◯ **C.** £42
- ◯ **D.** £440

Question 6 A price is increased by 20% then decreased by 20%. The final price compared to the original is:

- ◯ **A.** the same
- ◯ **B.** 4% lower

- ◯ **C.** 4% higher
- ◯ **D.** 20% lower

Question 7 A £200 coat is in a 30% off sale. What is the sale price?

- ◯ **A.** £60
- ◯ **B.** £170
- ◯ **C.** £140
- ◯ **D.** £260

Question 8 £600 is invested at simple interest and earns £72 in 3 years. The yearly rate is:

- ◯ **A.** 4%
- ◯ **B.** 12%
- ◯ **C.** 3%
- ◯ **D.** 6%

Question 9 Which calculation finds the original price if £45 is the price after a 25% decrease?

- ◯ **A.** 45×0.75
- ◯ **B.** $45 \div 0.75$
- ◯ **C.** 45×1.25
- ◯ **D.** $45 \div 1.25$

Question 10 Percentage change is always calculated by dividing the change by the:

- ◯ **A.** new value
- ◯ **B.** original value
- ◯ **C.** bigger value
- ◯ **D.** difference

Answer grid - Percentage change and simple interest

Year: Year 9

Question	Answer	Explanation
1	**C**	100% - 12% = 88% = 0.88.
2	**B**	150 × 1.04 = 156.
3	**C**	Change 5, divided by original 20 = 0.25 = 25%.
4	**B**	77 ÷ 1.1 = 70.
5	**B**	400 × 5 × 2 ÷ 100 = 40.
6	**B**	1.2 × 0.8 = 0.96, so 4% lower.
7	**C**	200 × 0.7 = 140.
8	**A**	100 × 72 ÷ (600 × 3) = 4.
9	**B**	The multiplier is 0.75; to reverse it, divide.
10	**B**	The change is measured relative to the original value.