Percentage Change

Grade 3 topic · Foundation and Higher · Edexcel and AQA

How to use this pack
20 questions that get harder as you go. Foundation students: aim for Questions 1–15 (35 marks) and have a go at the rest. Higher students: complete all 20. Show your working on the lines and write your final answer on the answer line, then mark yourself with the answers at the back. Diagrams are not drawn accurately. Total: 57 marks.

Warm-up

1 A bike costs £1300. The price is increased by 10%. Work out the new price. **[2 marks]**

Answer _____

2 A bike costs £700. The price is increased by 40%. Work out the new price. **[2 marks]**

Answer _____

3 A bike costs £400. The price is increased by 40%. Work out the new price. **[2 marks]**

Answer _____

4 A bike costs £400. The price is increased by 60%. Work out the new price. **[2 marks]**

Answer _____

5 A bike costs £1300. The price is increased by 20%. Work out the new price. **[2 marks]**

Answer _____

Core

6 A coat costs £300. In a sale the price is reduced by 25%. Work out the sale price. **[2 marks]**

Answer _____

7 A coat costs £600. In a sale the price is reduced by 50%. Work out the sale price. **[2 marks]**

Answer _____

8 A coat costs £700. In a sale the price is reduced by 30%. Work out the sale price. **[2 marks]**

Answer _____

9 A coat costs £300. In a sale the price is reduced by 30%. Work out the sale price. **[2 marks]**

Answer _____

10 A coat costs £1400. In a sale the price is reduced by 50%. Work out the sale price. **[2 marks]**

Answer _____

Stretch

11 The price of a game changes from £240 to £312. Work out the percentage increase. **[3 marks]**

Answer _____

12 The price of a game changes from £300 to £120. Work out the percentage decrease. **[3 marks]**

Answer _____

13 The price of a game changes from £220 to £264. Work out the percentage increase. **[3 marks]**

Answer _____

14 The price of a game changes from £180 to £108. Work out the percentage decrease. **[3 marks]**

Answer _____

15 The price of a game changes from £140 to £210. Work out the percentage increase. **[3 marks]**

Answer _____

Challenge

16 Sam buys a bike for £70 and sells it for £80. Work out his percentage profit. **[4 marks]**

Answer _____

17 A car loses 20% of its value in a year. It is now worth £7200. What was it worth a year ago? **[4 marks]**

Answer _____

18 A price is increased by 30% and then the new price is decreased by 30%. Work out the overall percentage change. **[5 marks]**

Answer _____

19 The population of a town rises from 6,900 to 8,000. Work out the percentage increase, to 1 decimal place. **[4 marks]**

Answer _____

20 A shirt originally costs £300. In week 1 of a sale it is reduced by 20%. In week 2 the sale price is reduced by a further 10%. Work out (a) the final price and (b) the overall percentage reduction. **[5 marks]**

Answer _____