

## Percentages

1. The price of an Ipad in a shop is £60. In a sale this price is decreased by 15%. Find the new price.
2. The price of a digital camera was reduced by 15% to £51. Find the original price.
3. The price of a Burberry woollen jumper in a sale is £45. It has been reduced by 40%. What was the original price?
4. In a sale all items were reduced by 40%. If a Ted baker cardigan cost £75 before the sale, find the sale price.
5. A shop reduced Playstation 2's by 25% when the Playstation 3 was launched. The sale price is £75.
  - a) Find 25% of £75
  - b) Increase £75 by 25%
  - c) What is the original price of the Playstation 2?
  - d) Explain why the answers to parts (b) and (c) are not the same.
6. In the UK, VAT is 17.5%. When you buy an item from a shop the VAT is already added into the purchase price. If you buy a nice chocolate bar costing £1, how much VAT are you paying?
7. By selling a car for £9,800 a dealer made 20% profit. How much did he pay for the car?
8. To clear goods during a sale, a shopkeeper reduced them by 10%. The sale price was £3.60. What was the original price?

## Percentages - Answers

1. The price of an Ipad in a shop is £60. In a sale this price is decreased by 15%. Find the new price. **£51**
2. The price of a digital camera was reduced by 15% to £51. Find the original price. **£60**
3. The price of a Burberry woollen jumper in a sale is £45. It has been reduced by 40%. What was the original price? **£75**
4. In a sale all items were reduced by 40%. If a Ted baker cardigan cost £75 before the sale, find the sale price. **£45**
5. A shop reduced Playstation 2's by 25% when the Playstation 3 was launched. The sale price is £75.
  - a) Find 25% of £75 **£18.75**
  - b) Increase £75 by 25% **£93.75**
  - c) What is the original price of the Playstation 2? **£100**
  - d) Explain why the answers to parts (b) and (c) are not the same. **25% of £75 vs 25% of £100, or, to get £100 in part (b) you need to increase by 33.3%**
6. In the UK, VAT is 17.5%. When you buy an item from a shop the VAT is already added into the purchase price. If you buy a nice chocolate bar costing £1, how much VAT are you paying? **14.89p ≈ 15p**
7. By selling a car for £9,800 a dealer made 20% profit. How much did he pay for the car? **£8,167**
8. To clear goods during a sale, a shopkeeper reduced them by 10%. The sale price was £3.60. What was the original price? **£4**