

Multi-Step Word Problems Percentage of Amounts

Aim: I can solve multi-step word problems involving percentages.

1. A grocer has 160kg of onions. 50% of the onions are sold in 2kg bags. The rest are sold loose. 20% of the loose onions and 12 bags of onions are left at the end of the day. What percentage of onions were sold that day?

2. A bookshop has a stock of 11 240 books. 45% of the books are adult fiction and 20% are children's fiction. 480 fiction books are sold in one week, 50% of which are children's fiction. How many children's books will be left at the end of the week?

3. A pallet holds 250 bricks. A builder orders three pallets. 60% of the bricks are used to build wall A. 80% of the remaining bricks from wall A are used to build wall B. How many bricks are left after building both walls?

4. A hospital charity has 25 people raising money by running a half marathon. The average each person raises is £120. 10% of the money is used to pay the entry fees for the half marathon. How much money is raised after the fees are paid?

5. There are 420 children in a school. 20% of the children bring a cold lunch from home. The rest of the children eat school meals, of which 25% eat a cold meal made by school. How many children eat a cold meal?

6. A Long-jumper trains for 32 hours a week. She spends 40% of the time running. 75% of the remaining time is spent on jumping practice. How much time does she spend practicing jumping?

7. A plumber charges £20 call out fee and £12 per hour. The plumber decides to decrease the call out fee by 25% and increase the hourly rate by 25%. Explain why the plumber will charge more for two hours work under the new charges.

8. Simon makes jam to sell at a market. The amount of sugar he uses is 40% of the weight of fruit. He uses 3.6kg of sugar. How much fruit will he use?

9. A school orders 1460 exercise books. 30% of the books have squared paper, 45% have lines and the remaining books are plain. By the end of the first term, all the squared and lined books have been used, and 80% of the plain books have been used. How many books are left?

10. A baby weighs 12kg and increases in weight by 20% each week. How many weeks will it take for the baby's weight to at least double?

Challenge

Write some simple multi-step word problems involving percentages for a partner.