



Problem solving with fractions, decimals and percentages - answers

1. In a closing-down sale, a shop offers 50% off the original prices. What fraction is taken off the prices?

Correct answer: $50\% = \frac{50}{100} = \frac{1}{2}$

2. In a survey, one in five people said they preferred a particular brand of cola. What is this figure as a percentage?

Correct answer: one in five is the same as saying $\frac{1}{5}$ of the people preferred a particular brand of cola. **So $(1 \div 5) \times 100\% = 20\%$**

3. Jamila is working out a problem involving $\frac{1}{4}$. She needs to enter this into a calculator. How would she enter $\frac{1}{4}$ as a decimal on the calculator?

Correct answer: $\frac{1}{4} = 1 \div 4 = 0.25$

4. Kyle pays tax at the rate of 25% of his income. What fraction of Kyle's income is this?

Correct answer: $25\% = \frac{25}{100} = \frac{1}{4}$

5. When Rani was buying her flat she had to put down a deposit of $\frac{1}{10}$ of the value of the flat. What percentage was this?

Correct answer: $\frac{1}{10} = (1 \div 10) \times 100\% = 10\%$

6. I bought my coat in the January sales with $\frac{1}{3}$ off the original price. What percentage was taken off the price of the coat?

Correct answer: $\frac{1}{3} = (1 \div 3) \times 100\% = 33.33$. **This is 33% to the nearest percentage.**

7. Linzi bought some fabric that was 1.75 metres long. How could this be written as a fraction?

Correct answer: $0.75 = \frac{75}{100} = \frac{3}{4}$. **So 1.75 metres written as a fraction is $1\frac{3}{4}$ metres.**