

Foundation GCSE: Percentages

Name: _____

Class: _____

Instructions: Answer all questions. Questions are ordered from easiest (1) to hardest (20). Working out should be shown where appropriate.

1. Write 50% as a fraction in its simplest form.
2. Write 25% as a decimal.
3. Find 10% of £80.
4. Find 50% of 140 kg.
5. Write $\frac{3}{5}$ as a percentage.
6. Find 20% of £45.
7. Find 5% of £60.
8. Write 0.35 as a percentage.
9. Find 1% of 400 ml.
10. Find 15% of 80 cm.
11. Express 15 as a percentage of 60.
12. Find 35% of £240.
13. Express 24 out of 80 as a percentage.
14. Find 17.5% of £400.
15. Write 12.5% as a fraction in its simplest form.
16. Find 8% of 350 g.
17. Express 45 minutes as a percentage of 3 hours.
18. Find the whole amount if 12% of it is £48.
19. A coat is priced at £120. During a sale, it is reduced by 15%. What is the sale price?
20. If x is increased by 25% to become 75, find the original value of x .

Answers & Worked Solutions

1. $\frac{1}{2}$
 $\frac{50}{100} = \frac{1}{2}$.
2. 0.25
 $25 \div 100 = 0.25$.
3. £8
 $80 \div 10 = 8$.
4. 70 kg
 $140 \div 2 = 70$.
5. 60%
 $\frac{3}{5} = \frac{60}{100} = 60\%$.
6. £9
 $10\% = 4.50$, so $20\% = 9$.
7. £3
 $10\% = 6$, so $5\% = 3$.
8. 35%
 $0.35 \times 100 = 35\%$.
9. 4 ml
 $400 \div 100 = 4$.
10. 12 cm
 $10\% = 8$, $5\% = 4$, *total* = 12.
11. 25%
 $\frac{15}{60} = \frac{1}{4} = 25\%$.
12. £84
 $30\% = 72$, $5\% = 12$, *total* = 84.
13. 30%
 $\frac{24}{80} = \frac{3}{10} = 30\%$.
14. £70
 $10\% = 40$, $5\% = 20$, $2.5\% = 10$, *total* = 70.
15. $\frac{1}{8}$
 $\frac{12.5}{100} = \frac{25}{200} = \frac{1}{8}$.
16. 28 g
 $10\% = 35$, $1\% = 3.5$, $8\% = 28$.
17. 25%
 $3 \text{ hours} = 180 \text{ mins}$. $\frac{45}{180} = \frac{1}{4} = 25\%$.
18. £400
 $12\% = 48 \implies 1\% = 4 \implies 100\% = 400$.
19. £102
 $10\% = 12$, $5\% = 6$, *discount* = 18. $120 - 18 = 102$.
20. 60
 $1.25x = 75 \implies x = 75 \div 1.25 = 60$.