

11+ Maths Practice — 20 Questions

Medium level • Questions on this page • Worked answers on next page

QUESTIONS

1. $348 + 579 = ?$
2. $7,842 - 3,459 = ?$
3. $128 \times 7 = ?$
4. $4,500 \div 9 = ?$
5. What is $3/4$ of 96?
6. Increase 240 by 15%.
7. Find the median of: 4, 9, 7, 12, 9.
8. A book costs £6.50. How much for 7 books?
9. $2/3 + 3/5 = ?$
10. A rectangle has area 56 cm^2 and width 7 cm. Find its length.
11. The ratio 5:3 is scaled up by $\times 4$. What is the new ratio?
12. $0.48 \div 0.6 = ?$
13. A pupil scores 18 out of 24. What percentage is this?
14. $3.75 \times 12 = ?$
15. What is the mean of: 5, 10, 15, 10?
16. A train travels 240 km in 3 hours. Find its speed (km/h).
17. $14^2 - 9^2 = ?$
18. Convert 3.4 km to metres.
19. Round 8,492 to the nearest hundred.
20. 25% of a number is 18. What is the number?

WORKED ANSWERS

- 1) $927 - 348 + 579 = (300+500) + (48+79) = 800 + 127 = 927.$
- 2) $4,383$ — Subtract column-wise with exchange: $7,842 - 3,459 = 4,383.$
- 3) $896 - 128 \times 7 = (100 \times 7) + (20 \times 7) + (8 \times 7) = 700 + 140 + 56.$
- 4) $500 - 4,500 \div 9 = 450 \div 9 \times 10 = 50 \times 10.$
- 5) $72 - \frac{3}{4} \text{ of } 96 = 96 \times 3 \div 4 = 24 \times 3.$
- 6) $276 - 15\% \text{ of } 240 = 0.15 \times 240 = 36; 240 + 36 = 276.$
- 7) 9 — Order: $4, 7, 9, 9, 12 \rightarrow$ middle value is $9.$
- 8) $\text{£}45.50 - 6.50 \times 7 = (6 \times 7) + (0.5 \times 7) = 42 + 3.5 = 45.5.$
- 9) $19/15 (1 \frac{4}{15})$ — Common denominator 15: $2/3=10/15, 3/5=9/15 \rightarrow$ sum $19/15.$
- 10) 8 cm — Area = length \times width $\Rightarrow 56 = 7 \times L \Rightarrow L = 56 \div 7.$
- 11) $20:12$ — Multiply both parts by 4: $(5 \times 4):(3 \times 4) = 20:12$ (can simplify to $5:3 \times 4$ if needed).
- 12) $0.8 - 0.48 \div 0.6 = 48/60 = 4/5 = 0.8.$
- 13) $75\% - 18/24 = 3/4 = 0.75 = 75\%.$
- 14) $45 - 3.75 \times 12 = (3.75 \times 10) + (3.75 \times 2) = 37.5 + 7.5.$
- 15) 10 — Mean = total \div number $= (5+10+15+10)=40; 40 \div 4 = 10.$
- 16) 80 km/h — Speed = distance \div time $= 240 \div 3.$
- 17) 115 — Difference of squares: $a^2 - b^2 = (a-b)(a+b) = (14-9)(14+9) = 5 \times 23.$
- 18) $3,400 \text{ m} - 1 \text{ km} = 1000 \text{ m} \Rightarrow 3.4 \times 1000.$
- 19) $8,500 - 8,492$ is closer to $8,500$ than $8,400.$
- 20) $72 - 25\% = 1/4 \Rightarrow \text{number} = 18 \div 0.25 = 18 \times 4.$

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