

# SOLVING FRACTIONAL EQUATIONS

Answer all of these questions. Remember to show your working out in all questions.

## MAIN QUESTIONS

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- |     |             |  |          |     |                |  |          |
|-----|-------------|--|----------|-----|----------------|--|----------|
| 1.  | $x/2 = 3$   |  | $x = 6$  | 2.  | $x/3 + 1 = 4$  |  | $x = 9$  |
| 3.  | $2x/5 = 4$  |  | $x = 10$ | 4.  | $3x/4 - 2 = 1$ |  | $x = 4$  |
| 5.  | $5x/2 = 15$ |  | $x = 6$  | 6.  | $x/4 + 3 = 5$  |  | $x = 8$  |
| 7.  | $7x/3 = 14$ |  | $x = 6$  | 8.  | $2x/3 - 1 = 3$ |  | $x = 6$  |
| 9.  | $4x/5 = 8$  |  | $x = 10$ | 10. | $x/2 + 5 = 8$  |  | $x = 6$  |
| 11. | $3x/7 = 6$  |  | $x = 14$ | 12. | $5x/4 - 2 = 3$ |  | $x = 4$  |
| 13. | $6x/5 = 12$ |  | $x = 10$ | 14. | $x/3 + 4 = 7$  |  | $x = 9$  |
| 15. | $9x/2 = 27$ |  | $x = 6$  | 16. | $2x/7 - 1 = 1$ |  | $x = 7$  |
| 17. | $8x/3 = 16$ |  | $x = 6$  | 18. | $x/5 + 2 = 4$  |  | $x = 10$ |
| 19. | $4x/9 = 8$  |  | $x = 18$ | 20. | $5x/6 - 3 = 2$ |  | $x = 6$  |

## MASTER QUESTIONS



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- M1. A train travels 300 miles in 5 hours. What is its average speed in miles per hour? | The train's average speed is 60 mph

- M2.** A recipe requires  $\frac{3}{4}$  cup of sugar for 12 cookies. How much sugar is needed for 36 cookies? | 2  $\frac{1}{4}$  cups of sugar are needed
- M3.** A tank is  $\frac{2}{5}$  full. After adding 120 litres, it is  $\frac{3}{4}$  full. What is the total capacity of the tank? | The tank's capacity is 480 litres
- M4.** A shop sells a shirt for £24, which is  $\frac{3}{5}$  of its original price. What was the original price? | The original price was £40