

SOLVING TWO STEP EQUATIONS

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

MAIN QUESTIONS

- | | | | | | | | |
|-----|------------------|--|---------|-----|-----------------|--|---------|
| 1. | $2x + 3 = 7$ | | $x = 2$ | 2. | $4x - 1 = 15$ | | $x = 4$ |
| 3. | $3x + 5 = 17$ | | $x = 4$ | 4. | $5x - 2 = 18$ | | $x = 4$ |
| 5. | $6x + 4 = 28$ | | $x = 4$ | 6. | $7x - 3 = 25$ | | $x = 4$ |
| 7. | $8x + 6 = 38$ | | $x = 4$ | 8. | $9x - 5 = 31$ | | $x = 4$ |
| 9. | $10x + 7 = 47$ | | $x = 4$ | 10. | $11x - 8 = 36$ | | $x = 4$ |
| 11. | $12x + 9 = 57$ | | $x = 4$ | 12. | $13x - 10 = 42$ | | $x = 4$ |
| 13. | $14x + 11 = 67$ | | $x = 4$ | 14. | $15x - 12 = 48$ | | $x = 4$ |
| 15. | $16x + 13 = 77$ | | $x = 4$ | 16. | $17x - 14 = 54$ | | $x = 4$ |
| 17. | $18x + 15 = 87$ | | $x = 4$ | 18. | $19x - 16 = 60$ | | $x = 4$ |
| 19. | $20x + 17 = 97$ | | $x = 4$ | 20. | $21x - 18 = 66$ | | $x = 4$ |
| 21. | $22x + 19 = 107$ | | $x = 4$ | 22. | $23x - 20 = 72$ | | $x = 4$ |
| 23. | $24x + 21 = 117$ | | $x = 4$ | 24. | $25x - 22 = 78$ | | $x = 4$ |
| 25. | $26x + 23 = 127$ | | $x = 4$ | 26. | $27x - 24 = 84$ | | $x = 4$ |
| 27. | $28x + 25 = 137$ | | $x = 4$ | 28. | $29x - 26 = 90$ | | $x = 4$ |

29. $30x + 27 = 147$

$x = 4$

30. $31x - 28 = 96$

$x = 4$

MASTER QUESTIONS



- M1.** A rectangle has a length that is 3cm more than twice its width. If the perimeter is 30cm, find the dimensions. | The rectangle is 4cm by 11cm
- M2.** A number multiplied by 5 and then decreased by 7 gives 38. Find the number. | The number is 9
- M3.** Sarah thinks of a number, multiplies it by 4 and subtracts 3. The result is 25. What is her number? | Her number is 7
- M4.** The sum of three consecutive even numbers is 42. Find the numbers. | The numbers are 12, 14 and 16
- M5.** A book costs £3 more than twice the price of a pen. If the book costs £15, how much does the pen cost? | The pen costs £6
- M6.** A train travels at a constant speed. In 5 hours it covers 15km more than twice the distance it covers in 2 hours. Find its speed. | The speed is 5km/h
- M7.** The area of a rectangle is 48cm^2 . If the length is 4cm more than twice the width, find the dimensions. | The rectangle is 4cm by 12cm
- M8.** A father is 4 years more than twice his son's age. In 5 years, the sum of their ages will be 59. Find their current ages. | The son is 15 and the father is 34

- M9.** A shop sells apples in bags. Each bag contains 3 more than twice the number of apples in a small box. If a bag contains 17 apples, how many are in a small box? | There are 7 apples in a small box
- M10.** The perimeter of a triangle is 45cm. The second side is 3cm longer than twice the first side, and the third side is 6cm longer than the first side. Find the length of each side. | The sides are 9cm, 21cm and 15cm