

Solving Equations with variables on both sides of the equal sign.

KEY

TYPE III

A. Solve the following.

1-25

1. $7x + 2 = 5x + 8$ $x = 3$ 10. $4x - 7 = 3x + 9$ $x = 16$ 19. $3x - 5 = 2x + 7$ $x = 12$
 2. $6x + 4x + 2x = 48$ $x = 4$ 11. $7x - 8 = 2x + 12$ $x = 4$ 20. $9x + 2 = 5x + 30$ $x = 7$
 3. $4x + 5x = 81$ $x = 9$ (12) $4x - 3x + 5x = 96$ $x = 16$ (21) $6x + 5x - 2x = 63$ $x = 7$
 4. $3x - 4 = 2x + 9$ $x = 13$ 13. $2x + 3x + 4x = 72$ $x = 8$ 22. $4x + 3x = 7$ $x = 1$
 5. $7x - 8 = 3x + 4$ $x = 3$ 14. $5x + 2 = 3x + 18$ $x = 8$ (23) $5x + 2 = 3x + 2$ $x = 0$
 6. $2x + 5x = 21$ $x = 3$ (15) $7x - 9 = 3x + 31$ $x = 10$ 24. $8x - 5 = 7x + 10$ $x = 15$
 7. $7x - 3x + 2x = 36$ $x = 6$ 16. $4x - 8 = 3x + 5$ $x = 13$ (25) $9x + 3x + 4x = 64$ $x = 4$
 8. $6x + 2x = 48$ $x = 6$ (17) $4x - 3x + 2x = 51$ $x = 17$
 9. $10x - 3 = 5x + 7$ $x = 2$ 18. $5x + 6 = 3x + 14$ $x = 4$

B. Solve the following.

1-10

1. $6x + 5 = 2x + 13$ $x = 2$ 11. $18x + 3 = 2x + 51$ $x = 3$ 21) $16x + 2 = x + 32$ $x = 2$
 2. $10x + 75 - 5x = 110$ $x = 7$ 12. $4x - 3 = 2x + 9$ $x = 6$ 22. $x + x + x + 3 = 15$ $x = 4$
 3. $4x + 3 + 5x - 2 = 64$ $x = 7$ (13) $8x - 5 = 3x + 5$ $x = 2$ (23) $7x + 5 - 2x + 3 = 23$ $x = 3$
 4. $4x + 2 = 3x + 8$ $x = 6$ 14. $9x - 4 = 2x + 10$ $x = 2$ 24. $7x + 2x - 3x + 5 = 47$ $x = 7$
 5. $6x - 4 = 2x + 100$ $x = 26$ 15. $7x - 5 = 3x + 11$ $x = 4$ 25. $6x + 3 + 5x + 8 = 66$ $x = 5$
 6. $4x - 3 = 29$ $x = 8$ (16) $6x + 5 = 2x + 13$ $x = 2$ (26) $7x + 12 - 5x - 8 = 30$ $x = 13$
 7. $5x + 7 = 3x + 9$ $x = 1$ 17. $3x - 5 + 2x = 75$ $x = 10$ 27. $8x + 5 + 3x + 2 = 95$ $x = 8$
 8. $9x - 3 = 4x + 22$ $x = 5$ 18. $4x + 5x - 8x = 10$ $x = 10$ (28) $6x - 3 = 4x + 9$ $x = 6$
 9. $8x - 3 = 2x + 9$ $x = 2$ (19) $7x - 2 = 3x + 10$ $x = 3$ (29) $9x - 8 = 3x + 4$ $x = 2$
 10. $35x - 10 = 32x + 20$ $x = 10$ 20. $6x - 3 = 2x + 5$ $x = 2$ 30. $4x - 3x + 5x - 7 = 11$ $x = 3$