
Importance

Linear Equations - Terms

★ Difficulty

- Collect like terms on left and right
- Isolate x and constants either side
- Simplify again
- Divide down the x coefficient and reduce*

$$1. \quad 3x + 5 + 2x = x + 8 + 3 \quad \boxed{x = \frac{6}{4}} \quad 2. \quad 2x - 4 + 3x = x + 7 - 2 \quad \boxed{x = \frac{9}{4}}$$

$$3. \quad 5x + 6 - 2x = x + 10 + 4 \quad \boxed{x = \frac{8}{2}} \quad 4. \quad 4x - 3 + x = 2x + 5 + 8 \quad \boxed{x = \frac{16}{3}}$$

$$5. \quad x + 12 + 2x = -x + 6 + 9 \quad \boxed{x = \frac{3}{4}} \quad 6. \quad 6x - 8 - x = 3x + 4 - 3 \quad \boxed{x = \frac{9}{2}}$$

$$7. \quad 3x + 7 + 4x = 2x - 5 + 12 \quad \boxed{x = \frac{0}{5}} \quad 8. \quad 2x - 6 + 5x = 3x + 8 - 4 \quad \boxed{x = \frac{10}{4}}$$

$$9. \quad 5x + 4 - 3x = x - 2 + 11 \quad \boxed{x = 5} \quad 10. \quad 4x + 9 + 3x = -2x + 15 - 6 \quad \boxed{x = \frac{0}{9}}$$

$$11. \quad x - 5 + 6x = 2x + 10 + 7 \quad \boxed{x = \frac{22}{5}} \quad 12. \quad 7x + 8 - 2x = 3x - 4 + 16 \quad \boxed{x = \frac{4}{2}}$$

$$13. \quad 3x - 7 + 2x = -x + 9 + 5 \quad \boxed{x = \frac{21}{6}} \quad 14. \quad 6x + 5 + x = 4x - 8 + 18 \quad \boxed{x = \frac{5}{3}}$$

$$15. \quad 2x + 11 + 4x = x - 3 + 14 \quad \boxed{x = \frac{0}{5}} \quad 16. \quad 5x - 9 - x = 2x + 6 - 5 \quad \boxed{x = \frac{10}{2}}$$

$$17. \quad 4x + 6 + 2x = -3x + 12 + 3 \quad \boxed{x = \frac{9}{9}} \quad 18. \quad x - 8 + 7x = 3x + 5 - 2 \quad \boxed{x = \frac{11}{5}}$$

$$19. \quad 8x + 4 - 3x = 2x - 6 + 10 \quad \boxed{x = \frac{0}{3}} \quad 20. \quad 3x - 12 + 5x = x + 8 + 4 \quad \boxed{x = \frac{24}{7}}$$