# Grade 7 Simple Equations Question Bank

1. **Solving Linear Equations**
   * Solve: x + 5 = 12
   * Find x: 3x = 18
   * Solve: 7 - x = 4
2. **Equations with Operations**
   * Solve: 2x + 3 = 11
   * Find x: 4x - 5 = 15
   * Solve: 9 = 3x + 3
3. **Equations with Fractions**
   * Solve: x/4 = 8
   * Find x: 2x/3 = 6
   * Solve: x/5 + 2 = 7
4. **Equations with Variables on Both Sides**
   * Solve: 2x + 1 = x + 5
   * Find x: 5x - 3 = 2x + 6
   * Solve: 4x + 7 = x + 13
5. **Distributive Property**
   * Solve: 2(x + 3) = 10
   * Find x: 3(2x - 1) = 15
   * Solve: 4(x + 2) = 20
6. **Word Problems**
   * A number increased by 7 is 15. Find the number.
   * Three times a number is 24. What is the number?
   * A book costs $5 more than a pen. If the book costs $12, find the cost of the pen.
7. **Forming Equations**
   * Write an equation: A number plus 8 equals 20.
   * Form an equation: Twice a number minus 5 is 11.
   * Create an equation: A number divided by 4 plus 3 equals 7.
8. **Equations with Negatives**
   * Solve: -x + 4 = 10
   * Find x: -3x = 12
   * Solve: 5 - 2x = -3
9. **Multi-Step Equations**
   * Solve: 2x + 4 = x + 7
   * Find x: 3(x - 2) + 5 = 14
   * Solve: 4x - 3 = 2x + 9
10. **Checking Solutions**
    * Verify if x = 3 is a solution to 2x + 1 = 7.
    * Check if x = 5 satisfies 3x - 4 = 11.
    * Confirm if x = 2 is a solution to x + 6 = 4x.
11. **Word Problems (Advanced)**
    * The sum of a number and twice itself is 27. Find the number.
    * A rectangle’s length is 3 more than its width. If the perimeter is 26 cm, find the width.
    * A person’s age now is 4 more than twice their age 5 years ago. Find their current age.
12. **Mixed Questions**
    * Solve: 5x/2 = 10 and verify the solution.
    * Form and solve: A number multiplied by 3, then reduced by 4, equals 11.
    * Solve: 2(x + 1) - 3 = x + 4 and check the solution.