

CLASS 8 · MATHS · CHAPTER 2

Linear Equations in One Variable

Quick recap, two solved examples, then it's your turn.

Name: _____ Date: _____

Remember

A linear equation in one variable has the form $ax + b = c$. Whatever you do to one side of the equation (add, subtract, multiply, divide), you must do exactly the same to the other side to keep it balanced.

Solved examples

Example 1: Solve $3x + 5 = 20$

$$3x = 20 - 5 = 15$$

$$x = 15 \div 3 = 5$$

Example 2: Solve $2(x - 3) = 10$

$$2x - 6 = 10$$

$$2x = 16$$

$$x = 8$$

Practice Set A — Solve for x

1. $2x + 7 = 19$

x = _____

3. $x/3 + 2 = 9$

x = _____

5. $3x - 5 = 2x + 4$

x = _____

7. $2x/5 = 8$

x = _____

9. $x/2 - 1 = 5$

x = _____

2. $5x - 4 = 26$

x = _____

4. $4(x + 1) = 24$

x = _____

6. $7 - x = 2$

x = _____

8. $6x + 3 = 4x + 15$

x = _____

10. $3(x - 2) = x + 6$

x = _____

Word problems

1. Rohit is 4 years older than his sister. If the sum of their ages is 22, form an equation and find both ages.

2. A number, when multiplied by 3 and then increased by 7, gives 40. Find the number.

3. The length of a rectangle is twice its breadth. If the perimeter is 60 cm, find the length and breadth.

4. Meera has ₹5 more than twice what Anu has. Together they have ₹65. How much does each have?

Answer key (Practice Set A): 1. $x=6$ 2. $x=6$ 3. $x=21$ 4. $x=5$ 5. $x=9$ 6. $x=5$ 7. $x=20$ 8. $x=6$ 9. $x=12$ 10. $x=6$