

Introduction to Algebra - Solving Linear Equations

Learning Objective

You will learn how to understand and solve simple linear equations.

Introduction

Linear equations are math sentences with numbers and letters, where the letter stands for a number we need to find.

For example, to solve $x + 5 = 12$, subtract 5 from both sides to find x . This gives us $x = 7$.

Key Concepts

- A linear equation looks like $ax + b = c$.
- The goal is to find the value of the letter (usually x).
- Use opposite math operations to solve the equation.
- Always do the same thing to both sides of the equation to keep it balanced.

Example Problem

Solve: $3x - 4 = 11$

Step 1: Add 4 to both sides $\rightarrow 3x = 15$

Step 2: Divide both sides by 3 $\rightarrow x = 5$