Introduction to Algebra - Solving Linear Equations

Learning Objective
Students will be able to understand and solve basic linear equations using inverse operations.

Introduction
Linear equations are mathematical expressions involving variables raised to the power of one. Solving lin

Key Concepts
- A linear equation is an equation of the form $ax + b = c$.
- The goal is to isolate the variable (usually x).
- Use inverse operations to 'undo' addition, subtraction, multiplication, or division.
- Always perform the same operation on both sides of the equation to keep it balanced.

Example Problem
Solve: $3x - 4 = 11$
Step 1: Add 4 to both sides -> $3x = 15$
Step 2: Divide both sides by 3 -> $x = 5$

Tips for Success
- Break down each step and take your time.
- Use visual aids or drawings if it helps you understand better.
- Practice with different problems to become more comfortable with the process.