Solving Systems of Equations

Today's Standard

HSA.REI.C5 - Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.

Real-World Applications for this Standard

Balancing chemical equations in chemistry; Determining the point of intersection between supply and demand curves in economics; Solving electrical circuit problems using Kirchhoff's laws; Optimizing resource allocation in operations research

Today I Learned

Today we learned how to solve systems of equations by changing one equation without changing the answers.

Common Stumbling Blocks

Some students think changing one equation changes the answers, but it doesn't. Others think they need to solve the sum of two equations separately, but they don't.

Quiz Me

- What is a system of equations?

- What happens when you change one equation in a system?

- What is the elimination method?

- Why is solving systems of equations important?

- Can you name a real-world example of using systems of equations?

Help Me

Solving systems of equations is like finding where two roads meet. It's important because it helps us solve real-world problems, like figuring out how much of two ingredients to mix together.