Proportional Relationships in Ratios

Today's Standard

7.RP.A2a - Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

Real-World Applications for this Standard

Comparing prices of different-sized products to determine the best buy.; Calculating speed by comparing distance and time.; Mixing ingredients in a recipe to maintain flavor proportions.; Scaling drawings or models up or down.

Today I Learned

Today, we learned how to tell if two things are in a proportional relationship by looking at their ratios or graphing them.

Common Stumbling Blocks

Some students think any straight line on a graph shows a proportional relationship, but it has to go through the origin (0,0). Others think only whole numbers can be equivalent ratios, but fractions and decimals can be too.

Quiz Me

- What is a ratio?
- What does it mean if two ratios are equivalent?
- What is a coordinate plane?
- What is the origin on a graph?
- How can you tell if a graph shows a proportional relationship?

Help Me

A proportional relationship means two things change at the same rate. For example, if you mix 2 cups of water with 1 cup of lemonade, and then mix 4 cups of water with 2 cups of lemonade, the taste stays the same because the ratio is the same.