Dividing by Unit Fractions

Today's Standard

5.NF.B7b - Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.

Real-World Applications for this Standard

Sharing 4 pizzas among 5 friends; Dividing 4 liters of juice into 1/5 liter servings; Partitioning a 4-meter rope into sections of 1/5 meter each

Today I Learned

Today, we learned how to divide whole numbers by unit fractions. For example, if you have 4 pizzas and divide them into 1/5 slices, you get 20 slices.

Common Stumbling Blocks

Kids often think dividing by a fraction makes the number smaller, but it actually makes it bigger. They also mix up dividing by a fraction with multiplying by a fraction.

Quiz Me

- What happens when you divide 4 by 1/5?
- How many 1/5s are in 4?
- What is the result of 4 ÷ 1/5?
- Is dividing by a fraction the same as multiplying by a fraction?
- What is a unit fraction?

Help Me

When you divide by a fraction, you are figuring out how many of those fractional parts fit into the whole number. For example, if you have 4 meters of rope and cut it into pieces that are 1/5 meter long, you will have 20 pieces.