Multiplying Fractions by Whole Numbers

Today's Standard

4.NF.B4b - Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.)

Real-World Applications for this Standard

Doubling a recipe that calls for 1/2 cup of sugar.; Distributing 3/4 of a pizza among 4 friends.; Calculating how many 1/3 mile laps are needed to run a total of 2 miles.

Today I Learned

Today, we learned how to multiply fractions by whole numbers. For example, if we have 3 pieces of 2/5 of a pie, we can see this as 6 pieces of 1/5 of a pie.

Common Stumbling Blocks

Sometimes, kids think that multiplying a fraction by a whole number makes the fraction bigger. They might also think they need to multiply both the top and bottom numbers of the fraction, which is not correct.

Quiz Me

- What do you multiply when you multiply a fraction by a whole number?
- Does the bottom number of the fraction change when you multiply it by a whole number?
- Can you show me how to multiply 2/3 by 4?
- What is 3 times 1/5?
- How can you use a picture to show 2 times 1/4?

Help Me

When we multiply a fraction by a whole number, we only multiply the top number of the fraction. For example, if we have 2/3 and we want to multiply it by 4, we multiply 2 by 4 to get 8/3. This can help us in real life, like when we need to measure ingredients for a recipe.