



Multiplying Rational Numbers

Today's Standard

7.NS.A2a - Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.

Cues	Notes
What is the distributive property?	The distributive property states that $a(b + c) = ab + ac$.
How do you multiply two negative numbers?	Multiplying two negative numbers results in a positive product, e.g., $(-1)(-1) = 1$.
What are real-world examples of multiplying rational numbers?	Examples include calculating profit/loss, temperature changes, and financial transactions. It helps in solving complex problems and prepares students for algebra.
Why is understanding rational number multiplication important?	Misconceptions include thinking the product of two negatives is negative and not applying rules to real-world contexts.
What are common misconceptions about multiplying signed numbers?	

Summary

Understanding the multiplication of rational numbers involves extending fraction multiplication to include negative numbers, using the distributive property. This knowledge is crucial for solving real-world problems and preparing for advanced math concepts.