



How to Multiply Fractions Together

KS2 MATHS

FRACTIONS

MULTIPLICATION

Ages 10-12  3 min read

The Golden Rule of Fraction Multiplication

Multiplying fractions might look tricky, but it's actually much simpler than adding or subtracting them! The **golden rule** is: multiply the **top numbers** together, and multiply the **bottom numbers** together. That's it!

When we write a fraction like $\frac{3}{4}$, the number on top is called the **numerator** and the number on the bottom is called the **denominator**. So if you're multiplying $\frac{2}{3} \times \frac{3}{5}$, you multiply 2×3 to get the new numerator, and 3×5 to get the new denominator. Your answer is $\frac{6}{15}$.

Think of it like combining pizza slices. If you have $\frac{1}{2}$ of a pizza and you want to find $\frac{1}{3}$ of that half, you're multiplying. You're finding a fraction of a fraction, which gives you a smaller piece.

A Simple Step-by-Step Example

Let's multiply $\frac{2}{5} \times \frac{1}{3}$. First, multiply the numerators: $2 \times 1 = 2$. Next, multiply the denominators: $5 \times 3 = 15$. Your answer is $\frac{2}{15}$. Easy!

Sometimes your answer can be **simplified** (made smaller). For example, if you get $\frac{6}{15}$, you can divide both the top and bottom by 3 to get $\frac{2}{5}$. This is the same amount, just written more simply.

Think of it like photocopying a photocopy. When you multiply fractions, you're making a fraction smaller, just like a blurry copy of a copy.

Why This Works

Fractions show parts of a whole. When you multiply fractions, you're finding a part of a part. Imagine you have $\frac{1}{2}$ of a chocolate bar. If you eat $\frac{1}{3}$ of that half, you haven't eaten half the bar anymore—you've eaten a smaller amount. Multiplying shows exactly how small that amount is.

Practice with Whole Numbers

You can also multiply a fraction by a **whole number**. Just put the whole number over **1** first. So $4 \times \frac{3}{5}$ becomes $\frac{4}{1} \times \frac{3}{5}$, which equals $\frac{12}{5}$. You can even turn that into a **mixed number**: $2 \frac{2}{5}$.