

What Are Improper Fractions?

Hey Bailey! Let's dive into the world of fractions, specifically **improper fractions**. An improper fraction is a fraction where the **numerator (the top number)** is bigger than the **denominator (the bottom number)**. For example, $\frac{7}{4}$ is an improper fraction because 7 is greater than 4.

Why Do We Use Improper Fractions?

Improper fractions are helpful in math because they can represent numbers greater than one. In fact, any improper fraction can be written as a whole number plus a fraction. For instance, if we take $\frac{7}{4}$, we can see that it equals **1** whole and $\frac{3}{4}$ left over. This makes it a bit easier to understand and work with.

How to Convert Improper Fractions to Mixed Numbers

1. Divide the numerator by the denominator. For $7 \div 4$, you get **1** with a remainder of **3**.
2. The whole number is the result of the division: in this case, it's **1**.
3. The remainder becomes the numerator of the new fraction, and the denominator stays the same. So, you take **3** (the remainder) and put it over **4**, giving you $\frac{3}{4}$.

So, $\frac{7}{4}$ can be rewritten as **1 $\frac{3}{4}$** (one and three-fourths).

Practice Makes Perfect

Want to try it yourself? Convert $\frac{9}{5}$ into a mixed number.

1. Divide: $9 \div 5 = 1$ (with a remainder of **4**)
2. The whole number is **1**.
3. The remainder is **4**, so you write it as $\frac{4}{5}$.

This means $\frac{9}{5} = 1 \frac{4}{5}$!

Wrapping Up

Improper fractions are just fractions that are greater than one. They can be converted to mixed numbers, which sometimes make them easier to understand. Keep practicing, and soon you'll be a fraction pro!