Adding and Subtracting Fractions

Adding and subtracting fractions might seem tricky at first, but with a little practice, you'll find it's really not that hard! Let's go through it step by step.

What is a Fraction?

A fraction represents a part of a whole. It has two parts: the **numerator** (the top number) and the **denominator** (the bottom number). For example, in the fraction **3/4**, 3 is the numerator and 4 is the denominator.

Adding Fractions

Same Denominator

When the denominators are the same, you just add the numerators:

Example:
Add **1/4 + 2/4**
Step 1: Keep the denominator the same (4).
Step 2: Add the numerators: 1 + 2 = 3.
The answer is **3/4**.

Different Denominators

When the denominators are different, you need to find a common denominator:

Example:
Add **1/3 + 1/6**
Step 1: Find a common denominator. The smallest number that both denominators (3 and 6) can divide into is 6.
Step 2: Change the fractions:
1/3 = 2/6 (because 1 x 2 = 2 and 3 x 2 = 6)
1/6 stays the same.
Step 3: Now add:
2/6 + 1/6 = 3/6.
Step 4: Simplify if needed. Here, 3/6 simplifies to 1/2.

Subtracting Fractions

Same Denominator

This is similar to adding:

Example:
Subtract **3/8 - 1/8**
Step 1: Keep the denominator (8).
Step 2: Subtract the numerators: 3 - 1 = 2.
The answer is **2/8**. This simplifies to **1/4**.

Different Denominators

Just like when adding fractions:

Example:
Subtract **2/5 - 1/10**
Step 1: Find a common denominator. (10 is the common denominator for 5 and 10).
Step 2: Change the fractions:
2/5 = 4/10.
Step 3: Subtract:
4/10 - 1/10 = 3/10.
The answer is **3/10**.

Practice Makes Perfect!

Try practicing with different sets of fractions, and pay attention to when you need to adjust the denominators. Soon, you'll be able to add and subtract fractions with confidence!