

Adding Fractions

4th Grade

Same bottom number: add the tops, leave the bottom alone.

When the denominators match, add only the numerators. The denominator names the size of the pieces and stays put.

$$a/c + b/c = (a+b)/c$$

$$3/8 + 2/8$$

$$5/8$$

Three eighths and two more eighths is five eighths.

$$5/6 + 4/6$$

$$9/6 = 1\frac{1}{2}$$

Going past 1 is fine. Simplify at the end.

$$7/10 - 3/10$$

$$4/10 = 2/5$$

Subtraction works exactly the same way.

$$1/4 + 1/4 + 1/4$$

$$3/4$$

Repeated adding is the same as $3 \times 1/4$.

THE COMMON MISTAKE

✗ $3/8 + 2/8 = 5/16$

✓ $3/8 + 2/8 = 5/8$

Adding the bottoms would change the size of the pieces, which nothing in the question did.

Different bottoms? Make them match first, using equivalent fractions.