

Adding Unlike Fractions

5th Grade

Unlike denominators have to be matched before anything can be added.

Find a common denominator, rewrite both fractions, then add only the numerators.

$$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

$$\frac{1}{2} + \frac{1}{3}$$

$$\frac{5}{6}$$

6 is the smallest number both 2 and 3 divide into.

$$\frac{2}{5} + \frac{1}{4}$$

$$\frac{13}{20}$$

20 is the least common denominator.

$$\frac{1}{6} + \frac{1}{3}$$

$$\frac{1}{2}$$

3 already divides into 6, so only one fraction changes.

$$\frac{3}{4} + \frac{5}{6}$$

$$\frac{19}{12} = 1\frac{7}{12}$$

Answers over 1 are fine — convert at the end.

THE COMMON MISTAKE

× $\frac{1}{2} + \frac{1}{3} = \frac{2}{5}$

✓ $\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$

Adding tops and bottoms separately is not addition. Half plus a third is more than half.

The multiples of the larger denominator are the fastest place to hunt for a common one.