

# Adding Fractions

Adding fractions can be easy when you have common denominators.



X ← The number on the top is known as the “numerator.”

Y ← The number on the bottom is known as the “denominator.”

**Example:**  $\frac{2}{8} + \frac{3}{8} = ?$

The denominator in both numbers is 8. All we have to add is the numerators.

$$\frac{2}{8} + \frac{3}{8} = \frac{2+3}{8} = \frac{5}{8}$$

For each problem below, follow the steps used in the example to find your solution.  
Be sure to reduce your fraction to its lowest terms.

1)  $\frac{4}{5} + \frac{1}{5} = ?$

5)  $\frac{55}{100} + \frac{23}{100} = ?$

2)  $\frac{10}{15} + \frac{12}{15} = ?$

6)  $\frac{76}{250} + \frac{43}{250} = ?$

3)  $\frac{6}{24} + \frac{9}{24} = ?$

7)  $\frac{13}{50} + \frac{14}{50} = ?$

4)  $\frac{11}{11} + \frac{11}{11} = ?$

8)  $\frac{90}{500} + \frac{90}{500} = ?$

# Adding Fractions

Adding fractions with unlike denominators may seem difficult at first, but once you learn all about common denominators, you will realize how easy they really are.



-If you want to add two fractions together, both fractions must have the same or "common" denominator.

-A common denominator is a shared multiple of the denominators in two or more fractions.

**Example:**  $\frac{2}{3} + \frac{1}{6} = ?$

-The first step in solving this equation is to find the common denominator.

-3 is a multiple of 6;  $3 \times 2 = 6$ . We have found our common denominator, which is 6.

-If we multiply the denominator by 2, we must multiply the numerator by 2 as well.

-Our new equation and result will look like this:

$$\frac{2 \times 2}{2 \times 3} + \frac{1}{6} = \frac{4}{6} + \frac{1}{6} = \frac{5}{6}$$

For each problem below, follow the steps used in the example to find your solution.  
Be sure to reduce your fraction to its lowest terms.

1)  $\frac{1}{3} + \frac{2}{5} = ?$

5)  $\frac{5}{6} + \frac{2}{5} = ?$

2)  $\frac{1}{9} + \frac{4}{7} = ?$

6)  $\frac{3}{8} + \frac{2}{9} = ?$

3)  $\frac{1}{4} + \frac{3}{8} = ?$

7)  $\frac{1}{2} + \frac{3}{4} = ?$

4)  $\frac{2}{7} + \frac{3}{5} = ?$

8)  $\frac{4}{8} + \frac{1}{2} = ?$