## **Adding Fractions With Unlike Denominators**

You can add fractions with unlike denominators. Start by making equivalent fractions using the least common denominator, and then add the fractions. Let's try it! Solve  $\frac{2}{3} + \frac{1}{4}$ .

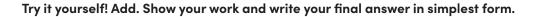
First, find the least common denominator. The least common denominator (LCD) is the smallest common multiple of both denominators. For this problem, the LCD is 12. Now, multiply to make equivalent fractions with a denominator of 12.

$$\frac{2\times4}{3\times4}=\frac{8}{12}$$

$$\frac{2 \times 4}{3 \times 4} = \frac{8}{12}$$
  $\frac{1 \times 3}{4 \times 3} = \frac{3}{12}$ 

Next, add the fractions. Add the numerators and keep the denominator the same. Make sure your answer is in simplest form.

$$\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$$



$$\frac{1}{5} + \frac{1}{2} = \frac{2}{10} + \frac{5}{10} = \frac{7}{10}$$

$$\frac{3}{8} + \frac{1}{4} = \frac{3}{8} + \frac{2}{8} = \frac{5}{8}$$

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

$$\frac{5}{12} + \frac{1}{3} = \frac{5}{12} + \frac{4}{12} = \frac{9}{12} = \frac{3}{4}$$

$$\frac{3}{4} + \frac{1}{7} = \frac{21}{28} + \frac{4}{28} = \frac{25}{28}$$

$$\frac{2}{3} + \frac{1}{5} = \frac{10}{15} + \frac{3}{15} = \frac{13}{15}$$

$$\frac{5}{8} + \frac{1}{6} = \frac{15}{24} + \frac{4}{24} = \frac{19}{24}$$

$$\frac{3}{4} + \frac{2}{9} = \frac{27}{36} + \frac{8}{36} = \frac{35}{36}$$