## **ADDING & SUBTRACTING**

To add or subtract fractions with unlike denominators, you need to rename them as fractions with like denominators. You can do this by making a list of equivalent fractions.

**Add.** 
$$\frac{5}{12} + \frac{1}{8}$$

Step 1 Write equivalent fractions for 
$$\frac{5}{12}$$
.  $\frac{5}{12}$ ,  $\frac{10}{24}$ ,  $\frac{15}{36}$ ,  $\frac{20}{48}$ 

Step 2 Write equivalent fractions for 
$$\frac{1}{8}$$
.  $\frac{1}{8}$ ,  $\frac{2}{16}$ ,  $\frac{3}{24}$ 

Step 3 Rewrite the problem using the equivalent fractions.

Then add.

$$\frac{5}{12} + \frac{1}{8}$$
 becomes  $\frac{10}{24} + \frac{3}{24} = \frac{13}{24}$ .

Subtract. 
$$\frac{9}{10} - \frac{1}{2}$$

Step 1 Write equivalent fractions for 
$$\frac{9}{10}$$
.  $(\frac{9}{10})^{\frac{18}{20}}, \frac{27}{30}$ 

Step 2 Write equivalent fractions for 
$$\frac{1}{2}$$
.  $\frac{1}{2}$ ,  $\frac{2}{4}$ ,  $\frac{3}{6}$ ,  $\frac{4}{8}$ ,  $\frac{5}{10}$ 

Step 3 Rewrite the problem using the equivalent fractions.

Then subtract.

$$\frac{9}{10} - \frac{1}{2}$$
 becomes  $\frac{9}{10} - \frac{5}{10} = \frac{4}{10}$ . Written in simplest form,  $\frac{4}{10} = \frac{2}{5}$ .

Stop when you find two fractions with the same denominator.