

Name: \_\_\_\_\_

## Adding Fractions

with the Unlike Denominator, Requires Simplifying

$$\begin{array}{r} \frac{1}{3} \\ + \frac{1}{6} \\ \hline \end{array} \quad \begin{array}{r} \frac{1}{3} = \frac{2}{6} \\ + \frac{1}{6} = \frac{1}{6} \\ \hline \end{array} \quad \begin{array}{r} \frac{1}{3} = \frac{2}{6} \\ + \frac{1}{6} = \frac{1}{6} \\ \hline \end{array} \quad \begin{array}{r} \frac{1}{3} = \frac{2}{6} \\ + \frac{1}{6} = \frac{1}{6} \\ \hline \frac{3}{6} \end{array} \quad \begin{array}{r} \frac{1}{3} \\ + \frac{1}{6} \\ \hline \frac{3}{6} = \frac{1}{2} \end{array}$$

The diagram shows the process of adding  $\frac{1}{3} + \frac{1}{6}$ . It starts with the original fractions, then shows the conversion of  $\frac{1}{3}$  to  $\frac{2}{6}$  to have a common denominator. The word "same" is written between the two converted fractions. The next step shows the addition of the numerators to get  $\frac{3}{6}$ . Finally, the fraction  $\frac{3}{6}$  is simplified to  $\frac{1}{2}$ .

Add the fractions and simplify the answers.

a.  $\frac{2}{12} + \frac{4}{6}$

b.  $\frac{4}{8} + \frac{1}{4}$

c.  $\frac{3}{5} + \frac{2}{10}$

d.  $\frac{1}{3} + \frac{3}{9}$

e.  $\frac{2}{10} + \frac{2}{5}$

f.  $\frac{3}{6} + \frac{2}{12}$

g.  $\frac{1}{2} + \frac{1}{10}$

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

i.  $\frac{1}{6} + \frac{4}{12}$

j.  $\frac{1}{4} + \frac{2}{8}$

k.  $\frac{1}{5} + \frac{2}{10}$

l.  $\frac{4}{14} + \frac{1}{7}$

m.  $\frac{1}{4} + \frac{1}{3} + \frac{3}{12}$

n.  $\frac{1}{2} + \frac{1}{10} + \frac{1}{5}$

o.  $\frac{1}{14} + \frac{2}{7} + \frac{1}{7}$

p.  $\frac{1}{8} + \frac{1}{2} + \frac{1}{8}$