

Name: _____

Adding Fractions

with the Unlike Denominator, Requires Simplifying

The diagram shows the following steps for adding $\frac{1}{3} + \frac{1}{6}$:

- Step 1: $\frac{1}{3}$ and $\frac{1}{6}$ are shown with a common denominator of 6. $\frac{1}{3}$ is converted to $\frac{2}{6}$.
- Step 2: The fractions are added: $\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$. A bracket labeled "same" indicates that the denominators are now the same.
- Step 3: The result $\frac{3}{6}$ is simplified to $\frac{1}{2}$.

Add the fractions and simplify the answers.

a.
$$\begin{array}{r} \frac{2}{12} \\ + \frac{4}{6} \\ \hline \end{array}$$

b.
$$\begin{array}{r} \frac{4}{8} \\ + \frac{1}{4} \\ \hline \end{array}$$

c.
$$\begin{array}{r} \frac{3}{5} \\ + \frac{2}{10} \\ \hline \end{array}$$

d.
$$\begin{array}{r} \frac{1}{3} \\ + \frac{3}{9} \\ \hline \end{array}$$

e.
$$\begin{array}{r} \frac{2}{10} \\ + \frac{2}{5} \\ \hline \end{array}$$

f.
$$\begin{array}{r} \frac{3}{6} \\ + \frac{2}{12} \\ \hline \end{array}$$

g.
$$\begin{array}{r} \frac{1}{2} \\ + \frac{1}{10} \\ \hline \end{array}$$

h.
$$\begin{array}{r} \frac{1}{6} \\ + \frac{1}{3} \\ \hline \end{array}$$

i.
$$\begin{array}{r} \frac{1}{6} \\ + \frac{4}{12} \\ \hline \end{array}$$

j.
$$\begin{array}{r} \frac{1}{4} \\ + \frac{2}{8} \\ \hline \end{array}$$

k.
$$\begin{array}{r} \frac{1}{5} \\ + \frac{2}{10} \\ \hline \end{array}$$

l.
$$\begin{array}{r} \frac{4}{14} \\ + \frac{1}{7} \\ \hline \end{array}$$

m.
$$\begin{array}{r} \frac{1}{4} \\ + \frac{1}{3} \\ + \frac{3}{12} \\ \hline \end{array}$$

n.
$$\begin{array}{r} \frac{1}{2} \\ + \frac{1}{10} \\ + \frac{1}{5} \\ \hline \end{array}$$

o.
$$\begin{array}{r} \frac{1}{14} \\ + \frac{2}{7} \\ + \frac{1}{7} \\ \hline \end{array}$$

p.
$$\begin{array}{r} \frac{1}{8} \\ + \frac{1}{2} \\ + \frac{1}{8} \\ \hline \end{array}$$