

Name: _____

Adding Fractions

with the Same Denominator, Requires Simplifying

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

Add the fractions and simplify the answers.

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

b. $\frac{4}{8}$
 $+\frac{2}{8}$

c. $\frac{1}{4}$
 $+\frac{1}{4}$

d. $\frac{1}{8}$
 $+\frac{1}{8}$

e. $\frac{1}{9}$
 $+\frac{2}{9}$

f. $\frac{5}{12}$
 $+\frac{3}{12}$

g. $\frac{5}{10}$
 $+\frac{1}{10}$

h. $\frac{1}{8}$
 $+\frac{3}{8}$

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

j. $\frac{3}{10}$
 $+\frac{2}{10}$

k. $\frac{1}{12}$
 $+\frac{2}{12}$

l. $\frac{3}{9}$
 $+\frac{3}{9}$

m. $\frac{5}{10}$
 $+\frac{3}{10}$

n. $\frac{2}{6}$
 $+\frac{1}{6}$

o. $\frac{5}{8}$
 $+\frac{1}{8}$

p. $\frac{1}{9}$
 $+\frac{5}{9}$

q. $\frac{3}{12}$
 $+\frac{1}{12}$

r. $\frac{4}{10}$
 $+\frac{2}{10}$

s. $\frac{2}{8}$
 $+\frac{2}{8}$

t. $\frac{6}{12}$
 $+\frac{3}{12}$

ANSWER KEY

Adding Fractions

with the Same Denominator, Requires Simplifying

The diagram shows four stages of adding $\frac{1}{6} + \frac{2}{6}$:

- Vertical addition: $\frac{1}{6} + \frac{2}{6}$
- Step 1: A blue arrow points from the 1 in the numerator to the 2, with the word "same" written next to it, indicating that the denominators are the same.
- Step 2: A blue arrow points from the 2 to the 1, and another blue arrow points from the 2 to the 6, showing the addition of numerators to get 3 and the denominator remains 6, resulting in $\frac{3}{6}$.
- Step 3: A blue arrow points from the 3 to the 6, and another blue arrow points from the 6 to the 2, showing the simplification of $\frac{3}{6}$ to $\frac{1}{2}$.

Add the fractions and simplify the answers.

a. $\frac{2}{6} + \frac{2}{6} = \frac{4}{6} = \frac{2}{3}$

b. $\frac{4}{8} + \frac{2}{8} = \frac{6}{8} = \frac{3}{4}$

c. $\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$

d. $\frac{1}{8} + \frac{1}{8} = \frac{2}{8} = \frac{1}{4}$

e. $\frac{1}{9} + \frac{2}{9} = \frac{3}{9} = \frac{1}{3}$

f. $\frac{5}{12} + \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$

g. $\frac{5}{10} + \frac{1}{10} = \frac{6}{10} = \frac{3}{5}$

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

i. $\frac{1}{6} + \frac{1}{6} = \frac{2}{6} = \frac{1}{3}$

j. $\frac{3}{10} + \frac{2}{10} = \frac{5}{10} = \frac{1}{2}$

k. $\frac{1}{12} + \frac{2}{12} = \frac{3}{12} = \frac{1}{4}$

l. $\frac{3}{9} + \frac{3}{9} = \frac{6}{9} = \frac{2}{3}$

m. $\frac{5}{10} + \frac{3}{10} = \frac{8}{10} = \frac{4}{5}$

n. $\frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$

o. $\frac{5}{8} + \frac{1}{8} = \frac{6}{8} = \frac{3}{4}$

p. $\frac{1}{9} + \frac{5}{9} = \frac{6}{9} = \frac{2}{3}$

q. $\frac{3}{12} + \frac{1}{12} = \frac{4}{12} = \frac{1}{3}$

r. $\frac{4}{10} + \frac{2}{10} = \frac{6}{10} = \frac{3}{5}$

s. $\frac{2}{8} + \frac{2}{8} = \frac{4}{8} = \frac{1}{2}$

t. $\frac{6}{12} + \frac{3}{12} = \frac{9}{12} = \frac{3}{4}$