

Name: _____

Adding Mixed Numbers

with the Like Denominators, Requires Simplifying

The diagram shows the addition of $3\frac{3}{8}$ and $2\frac{1}{8}$ in three stages:

- Stage 1: $3\frac{3}{8}$ and $2\frac{1}{8}$ are written vertically. A bracket labeled "same" indicates that the denominators are the same.
- Stage 2: The fractions are added: $3\frac{3}{8} + 2\frac{1}{8} = 5\frac{4}{8}$. A blue arrow points from the $\frac{4}{8}$ to the next stage.
- Stage 3: The final result is shown as $5\frac{4}{8} = 5\frac{1}{2}$.

Add the fractions and simplify the answers.

a. $5\frac{2}{6}$
 $+ 4\frac{2}{6}$

b. $6\frac{1}{4}$
 $+ 1\frac{1}{4}$

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

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

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

f. $2\frac{3}{12}$
 $+ \frac{1}{12}$

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

h. $2\frac{3}{14}$
 $+ 1\frac{3}{14}$

i. $\frac{1}{6}$
 $+ 4\frac{2}{6}$

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

k. $2\frac{2}{9}$
 $+ 3\frac{4}{9}$

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

m. $6\frac{4}{10}$
 $+ 2\frac{2}{10}$

n. $5\frac{6}{14}$
 $+ \frac{4}{14}$

o. $1\frac{2}{12}$
 $+ 7\frac{4}{12}$

- p. Tom's family ate $1\frac{2}{8}$ apple pies.
Susie's family ate $1\frac{4}{8}$ cherry pies.
How much pie did both families eat?

ANSWER KEY

Adding Mixed Numbers

with the Like Denominators, Requires Simplifying

$$\begin{array}{r} 3 \frac{3}{8} \\ + 2 \frac{1}{8} \\ \hline \end{array}$$
$$\begin{array}{r} 3 \frac{3}{8} \\ + 2 \frac{1}{8} \\ \hline 8 \end{array}$$
$$\begin{array}{r} 3 \frac{3}{8} \\ + 2 \frac{1}{8} \\ \hline 4 \\ 8 \end{array}$$
$$\begin{array}{r} 3 \frac{3}{8} \\ + 2 \frac{1}{8} \\ \hline 5 \frac{4}{8} \end{array}$$
$$\begin{array}{r} 3 \frac{3}{8} \\ + 2 \frac{1}{8} \\ \hline 5 \frac{4}{8} = 5 \frac{1}{2} \end{array}$$

Add the fractions and simplify the answers.

a.
$$\begin{array}{r} 5 \frac{2}{6} \\ + 4 \frac{2}{6} \\ \hline 9 \frac{4}{6} = 9 \frac{2}{3} \end{array}$$

b.
$$\begin{array}{r} 6 \frac{1}{4} \\ + 1 \frac{1}{4} \\ \hline 7 \frac{2}{4} = 7 \frac{1}{2} \end{array}$$

c.
$$\begin{array}{r} 3 \frac{2}{10} \\ + 5 \frac{3}{10} \\ \hline 8 \frac{5}{10} = 8 \frac{1}{2} \end{array}$$

d.
$$\begin{array}{r} 3 \frac{2}{8} \\ + 6 \frac{4}{8} \\ \hline 9 \frac{6}{8} = 9 \frac{3}{4} \end{array}$$

e.
$$\begin{array}{r} 3 \frac{2}{9} \\ + 1 \frac{1}{9} \\ \hline 4 \frac{3}{9} = 4 \frac{1}{3} \end{array}$$

f.
$$\begin{array}{r} 2 \frac{3}{12} \\ + \frac{1}{12} \\ \hline 2 \frac{4}{12} = 2 \frac{1}{3} \end{array}$$

g.
$$\begin{array}{r} 1 \frac{3}{10} \\ + 5 \frac{5}{10} \\ \hline 6 \frac{8}{10} = 6 \frac{4}{5} \end{array}$$

h.
$$\begin{array}{r} 2 \frac{3}{14} \\ + 1 \frac{3}{14} \\ \hline 3 \frac{6}{14} = 3 \frac{3}{7} \end{array}$$

i.
$$\begin{array}{r} \frac{1}{6} \\ + 4 \frac{2}{6} \\ \hline 4 \frac{3}{6} = 4 \frac{1}{2} \end{array}$$

j.
$$\begin{array}{r} 2 \frac{1}{8} \\ + 4 \frac{1}{8} \\ \hline 6 \frac{2}{8} = 6 \frac{1}{4} \end{array}$$

k.
$$\begin{array}{r} 2 \frac{2}{9} \\ + 3 \frac{4}{9} \\ \hline 5 \frac{6}{9} = 5 \frac{2}{3} \end{array}$$

l.
$$\begin{array}{r} 1 \frac{3}{12} \\ + 1 \frac{3}{12} \\ \hline 2 \frac{6}{12} = 2 \frac{1}{2} \end{array}$$

m.
$$\begin{array}{r} 6 \frac{4}{10} \\ + 2 \frac{2}{10} \\ \hline 8 \frac{6}{10} = 8 \frac{3}{5} \end{array}$$

n.
$$\begin{array}{r} 5 \frac{6}{14} \\ + \frac{4}{14} \\ \hline 5 \frac{10}{14} = 5 \frac{5}{7} \end{array}$$

o.
$$\begin{array}{r} 1 \frac{2}{12} \\ + 7 \frac{4}{12} \\ \hline 8 \frac{6}{12} = 8 \frac{1}{2} \end{array}$$

p. Tom's family ate $1 \frac{2}{8}$ apple pies.
Susie's family ate $1 \frac{4}{8}$ cherry pies.
How much pie did both families eat?

$$\begin{array}{r} 1 \frac{2}{8} \\ + 1 \frac{4}{8} \\ \hline 2 \frac{6}{8} = 2 \frac{3}{4} \end{array}$$