

Name: _____

Subtracting Mixed Numbers

with the Like Denominators, Requires Simplifying

$$\begin{array}{r}
 3 \frac{3}{8} \\
 - 2 \frac{1}{8} \\
 \hline
 \end{array}$$

Diagram illustrating the subtraction process with like denominators. The mixed number $3 \frac{3}{8}$ is converted to $2 \frac{11}{8}$ by borrowing 1 from the whole number. Then $2 \frac{11}{8} - 2 \frac{1}{8} = 2 \frac{10}{8} = 2 \frac{5}{4} = 1 \frac{2}{8} = 1 \frac{1}{4}$.

Add the fractions and simplify the answers.

a.
$$\begin{array}{r}
 5 \frac{4}{6} \\
 - 4 \frac{2}{6} \\
 \hline
 \end{array}$$

b.
$$\begin{array}{r}
 6 \frac{3}{4} \\
 - 1 \frac{1}{4} \\
 \hline
 \end{array}$$

c.
$$\begin{array}{r}
 9 \frac{5}{10} \\
 - 5 \frac{3}{10} \\
 \hline
 \end{array}$$

d.
$$\begin{array}{r}
 8 \frac{6}{8} \\
 - 6 \frac{4}{8} \\
 \hline
 \end{array}$$

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

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

g.
$$\begin{array}{r}
 7 \frac{9}{10} \\
 - 5 \frac{5}{10} \\
 \hline
 \end{array}$$

h.
$$\begin{array}{r}
 2 \frac{7}{14} \\
 - 2 \frac{3}{14} \\
 \hline
 \end{array}$$

i.
$$\begin{array}{r}
 5 \frac{4}{6} \\
 - 4 \frac{2}{6} \\
 \hline
 \end{array}$$

j.
$$\begin{array}{r}
 6 \frac{5}{8} \\
 - 4 \frac{1}{8} \\
 \hline
 \end{array}$$

k.
$$\begin{array}{r}
 4 \frac{8}{9} \\
 - 3 \frac{2}{9} \\
 \hline
 \end{array}$$

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

m.
$$\begin{array}{r}
 6 \frac{6}{10} \\
 - 3 \frac{2}{10} \\
 \hline
 \end{array}$$

n.
$$\begin{array}{r}
 5 \frac{6}{14} \\
 - \frac{4}{14} \\
 \hline
 \end{array}$$

o.
$$\begin{array}{r}
 7 \frac{6}{12} \\
 - 1 \frac{4}{12} \\
 \hline
 \end{array}$$

p. Tom walked $2 \frac{5}{6}$ miles on Wednesday.

He walked $1 \frac{1}{6}$ miles on Thursday.

How many more miles did he walk on Tuesday?

ANSWER KEY

Subtracting Mixed Numbers

with the Like Denominators, Requires Simplifying

$$\begin{array}{r} 3\frac{3}{8} \\ - 2\frac{1}{8} \\ \hline \end{array}$$

Diagram illustrating the subtraction process:

- The first step shows the mixed numbers $3\frac{3}{8}$ and $2\frac{1}{8}$ with a bracket labeled "same" indicating the common denominator of 8.
- The second step shows the subtraction of the fractions: $3\frac{3}{8} - 2\frac{1}{8} = 1\frac{2}{8}$. A blue arrow points from the 3 in the whole number part to the 3 in the numerator, and another blue arrow points from the 1 in the denominator to the 2 in the numerator, showing the conversion of 3 to $2\frac{8}{8}$.
- The final result is $1\frac{2}{8} = 1\frac{1}{4}$.

Add the fractions and simplify the answers.

a.
$$\begin{array}{r} 5\frac{4}{6} \\ - 4\frac{2}{6} \\ \hline 1\frac{2}{6} = 1\frac{1}{3} \end{array}$$

b.
$$\begin{array}{r} 6\frac{3}{4} \\ - 1\frac{1}{4} \\ \hline 5\frac{2}{4} = 5\frac{1}{2} \end{array}$$

c.
$$\begin{array}{r} 9\frac{5}{10} \\ - 5\frac{3}{10} \\ \hline 4\frac{2}{10} = 4\frac{1}{5} \end{array}$$

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

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

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

g.
$$\begin{array}{r} 7\frac{9}{10} \\ - 5\frac{5}{10} \\ \hline 2\frac{4}{10} = 2\frac{2}{5} \end{array}$$

h.
$$\begin{array}{r} 2\frac{7}{14} \\ - 2\frac{3}{14} \\ \hline \frac{4}{14} = \frac{2}{7} \end{array}$$

i.
$$\begin{array}{r} 5\frac{4}{6} \\ - 4\frac{2}{6} \\ \hline 1\frac{2}{6} = 1\frac{1}{3} \end{array}$$

j.
$$\begin{array}{r} 6\frac{5}{8} \\ - 4\frac{1}{8} \\ \hline 2\frac{4}{8} = 2\frac{1}{2} \end{array}$$

k.
$$\begin{array}{r} 4\frac{8}{9} \\ - 3\frac{2}{9} \\ \hline 1\frac{6}{9} = 1\frac{2}{3} \end{array}$$

l.
$$\begin{array}{r} 1\frac{6}{12} \\ - 1\frac{3}{12} \\ \hline \frac{3}{12} = \frac{1}{4} \end{array}$$

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

n.
$$\begin{array}{r} 5\frac{6}{14} \\ - \frac{4}{14} \\ \hline 5\frac{2}{14} = 5\frac{1}{7} \end{array}$$

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

p. Tom walked $2\frac{5}{6}$ miles on Wednesday.

He walked $1\frac{1}{6}$ miles on Thursday.

How many more miles did he walk on Tuesday?

$$\begin{array}{r} 2\frac{5}{6} \\ - 1\frac{1}{6} \\ \hline 1\frac{4}{6} = 1\frac{2}{3} \end{array}$$