

Name: _____

Subtracting Mixed Numbers

with Like Denominators, Requires Simplifying

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

Diagram illustrating the subtraction process:

- Step 1: $3 \frac{3}{8} - 2 \frac{1}{8}$ (Denominators are the same)
- Step 2: Borrowing 1 from the whole number 3 to convert it to 2 and $\frac{8}{8}$, then adding $\frac{8}{8}$ to the fraction part to get $1 \frac{9}{8}$.
- Step 3: $1 \frac{9}{8} - 2 \frac{1}{8} = 1 \frac{2}{8} = 1 \frac{1}{4}$

Subtract 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 Wednesday?

ANSWER KEY

Subtracting Mixed Numbers

with Like Denominators, Requires Simplifying

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

Diagram illustrating the subtraction process for $3\frac{3}{8} - 2\frac{1}{8}$. The first step shows the mixed numbers with a bracket labeled "same" indicating the common denominator of 8. The second step shows the subtraction of the whole numbers (3 - 2) and the fractions ($\frac{3}{8} - \frac{1}{8}$), resulting in $1\frac{2}{8}$. The final step shows the simplified answer: $1\frac{2}{8} = 1\frac{1}{4}$.

Subtract the fractions and simplify the answers.

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

$$1\frac{2}{6} \text{ or } 1\frac{1}{3}$$

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

$$5\frac{2}{4} \text{ or } 5\frac{1}{2}$$

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

$$4\frac{2}{10} \text{ or } 4\frac{1}{5}$$

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

$$2\frac{2}{8} \text{ or } 2\frac{1}{4}$$

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

$$2\frac{3}{9} \text{ or } 2\frac{1}{3}$$

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

$$2\frac{2}{12} \text{ or } 2\frac{1}{6}$$

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

$$2\frac{4}{10} \text{ or } 2\frac{2}{5}$$

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

$$\frac{4}{14} \text{ or } \frac{2}{7}$$

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

$$1\frac{2}{6} \text{ or } 1\frac{1}{3}$$

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

$$2\frac{4}{8} \text{ or } 2\frac{1}{2}$$

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

$$1\frac{6}{9} \text{ or } 1\frac{2}{3}$$

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

$$\frac{3}{12} \text{ or } \frac{1}{4}$$

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

$$3\frac{4}{10} \text{ or } 3\frac{2}{5}$$

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

$$5\frac{2}{14} \text{ or } 5\frac{1}{7}$$

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

$$6\frac{2}{12} \text{ or } 6\frac{1}{6}$$

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 Wednesday?

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

$$1\frac{4}{6} \text{ or } 1\frac{2}{3} \text{ miles}$$