

Name: _____

Subtracting Mixed Numbers

With Different Denominators

Step 1: Find the Least Common Denominator (LCD).

$$\begin{array}{r} 3\frac{1}{2} \\ - 2\frac{3}{8} \end{array} \left. \vphantom{\begin{array}{r} 3\frac{1}{2} \\ - 2\frac{3}{8} \end{array}} \right\} \text{LCD} = 8$$

Step 2: Using the LCD, find equivalent fractions.

$$\begin{array}{r} 3\frac{1}{2} = 3\frac{4}{8} \\ - 2\frac{3}{8} = - 2\frac{3}{8} \end{array}$$

Step 3: Subtract the fractions.

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

Step 4: Subtract the whole numbers.

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

Solve and simplify your answer.

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

b.
$$\begin{array}{r} 9\frac{5}{9} \\ - 3\frac{1}{3} \\ \hline \end{array}$$

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

d.
$$\begin{array}{r} 6\frac{7}{15} \\ - 1\frac{2}{5} \\ \hline \end{array}$$

e.
$$\begin{array}{r} 6\frac{5}{6} \\ - 3\frac{5}{12} \\ \hline \end{array}$$

f.
$$\begin{array}{r} 1\frac{3}{4} \\ - \frac{5}{16} \\ \hline \end{array}$$

g.
$$\begin{array}{r} 12\frac{5}{8} \\ - 7\frac{2}{5} \\ \hline \end{array}$$

h.
$$\begin{array}{r} 7\frac{9}{11} \\ - 5\frac{1}{2} \\ \hline \end{array}$$

i.
$$\begin{array}{r} 2\frac{1}{2} \\ - 2\frac{5}{16} \\ \hline \end{array}$$

j.
$$\begin{array}{r} 12\frac{7}{9} \\ - 9\frac{2}{3} \\ \hline \end{array}$$

k.
$$\begin{array}{r} 4\frac{4}{7} \\ - 2\frac{1}{4} \\ \hline \end{array}$$

l.
$$\begin{array}{r} 5\frac{13}{24} \\ - \frac{5}{12} \\ \hline \end{array}$$

m.
$$\begin{array}{r} 7\frac{3}{4} \\ - \frac{9}{16} \\ \hline \end{array}$$

n.
$$\begin{array}{r} 15\frac{17}{20} \\ - 10\frac{7}{10} \\ \hline \end{array}$$

o.
$$\begin{array}{r} 6\frac{7}{8} \\ - 3\frac{3}{5} \\ \hline \end{array}$$

p.
$$\begin{array}{r} 4\frac{9}{14} \\ - 1\frac{3}{7} \\ \hline \end{array}$$

ANSWER KEY

Subtracting Mixed Numbers

With Different Denominators

Step 1: Find the Least Common Denominator (LCD).

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

Step 2: Using the LCD, find equivalent fractions.

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

Step 3: Subtract the fractions.

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

Step 4: Subtract the whole numbers.

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

Solve and simplify your answer.

a.
$$\begin{array}{r} 8\frac{5}{8} \\ - 4\frac{1}{4} \\ \hline 4\frac{3}{8} \end{array}$$

b.
$$\begin{array}{r} 9\frac{5}{9} \\ - 3\frac{1}{3} \\ \hline 6\frac{2}{9} \end{array}$$

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

d.
$$\begin{array}{r} 6\frac{7}{15} \\ - 1\frac{2}{5} \\ \hline 5\frac{1}{15} \end{array}$$

e.
$$\begin{array}{r} 6\frac{5}{6} \\ - 3\frac{5}{12} \\ \hline 3\frac{5}{12} \end{array}$$

f.
$$\begin{array}{r} 1\frac{3}{4} \\ - \frac{5}{16} \\ \hline 1\frac{7}{16} \end{array}$$

g.
$$\begin{array}{r} 12\frac{5}{8} \\ - 7\frac{2}{5} \\ \hline 5\frac{9}{40} \end{array}$$

h.
$$\begin{array}{r} 7\frac{9}{11} \\ - 5\frac{1}{2} \\ \hline 2\frac{7}{22} \end{array}$$

i.
$$\begin{array}{r} 2\frac{1}{2} \\ - 2\frac{5}{16} \\ \hline 3\frac{3}{16} \end{array}$$

j.
$$\begin{array}{r} 12\frac{7}{9} \\ - 9\frac{2}{3} \\ \hline 3\frac{1}{9} \end{array}$$

k.
$$\begin{array}{r} 4\frac{4}{7} \\ - 2\frac{1}{4} \\ \hline 2\frac{9}{28} \end{array}$$

l.
$$\begin{array}{r} 5\frac{13}{24} \\ - \frac{5}{12} \\ \hline 5\frac{3}{24} = 5\frac{1}{8} \end{array}$$

m.
$$\begin{array}{r} 7\frac{3}{4} \\ - \frac{9}{16} \\ \hline 7\frac{3}{16} \end{array}$$

n.
$$\begin{array}{r} 15\frac{17}{20} \\ - 10\frac{7}{10} \\ \hline 5\frac{3}{20} \end{array}$$

o.
$$\begin{array}{r} 6\frac{7}{8} \\ - 3\frac{3}{5} \\ \hline 3\frac{11}{40} \end{array}$$

p.
$$\begin{array}{r} 4\frac{9}{14} \\ - 1\frac{3}{7} \\ \hline 3\frac{3}{14} \end{array}$$