

Lesson 1.4 Adding Fractions and Mixed Numbers

To add fractions or mixed numbers when the denominators are different, rename the fractions so the denominators are the same.

$$\begin{array}{r} \frac{2}{3} \\ + \frac{3}{7} \\ \hline \end{array} = \begin{array}{r} \frac{2}{3} \times \frac{7}{7} \\ + \frac{3}{7} \times \frac{3}{3} \\ \hline \end{array} = \begin{array}{r} \frac{14}{21} \\ + \frac{9}{21} \\ \hline \frac{23}{21} = 1\frac{2}{21} \end{array}$$

$$\begin{array}{r} 3\frac{1}{2} \\ + 2\frac{2}{3} \\ \hline \end{array} = \begin{array}{r} 3\frac{3}{6} \\ + 2\frac{4}{6} \\ \hline 5\frac{7}{6} = 6\frac{1}{6} \end{array}$$

Add. Write each answer in simplest form.

a**1.**

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

b

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

c

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

d

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

2.

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

$$\begin{array}{r} \frac{1}{2} \\ + \frac{3}{10} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{2}{3} \\ + \frac{3}{12} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{3}{4} \\ + \frac{7}{10} \\ \hline \end{array}$$

3.

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

$$\begin{array}{r} \frac{2}{5} \\ + \frac{3}{7} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{1}{7} \\ + \frac{7}{8} \\ \hline \end{array}$$

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

4.

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

$$\begin{array}{r} 3\frac{3}{8} \\ + 7\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 4\frac{2}{7} \\ + 2\frac{1}{3} \\ \hline \end{array}$$

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

5.

$$\begin{array}{r} 4\frac{4}{9} \\ + 3\frac{1}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 1\frac{1}{8} \\ + 1\frac{7}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 2\frac{1}{6} \\ + 3\frac{5}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 1\frac{3}{7} \\ + 2\frac{1}{5} \\ \hline \end{array}$$

6.

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

$$\begin{array}{r} 2\frac{5}{6} \\ + 1\frac{5}{9} \\ \hline \end{array}$$

$$\begin{array}{r} 3\frac{4}{7} \\ + 1\frac{1}{10} \\ \hline \end{array}$$

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