

Lesson 13 Addition and Subtraction

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

The denominators are 4 and 5.
Since $4 \times 5 = 20$, rename each fraction with a denominator of 20.

$$\begin{array}{r} \frac{3}{4} \rightarrow \frac{15}{20} \\ + \frac{3}{5} \rightarrow + \frac{12}{20} \\ \hline \frac{27}{20} = 1\frac{7}{20} \end{array} \qquad \begin{array}{r} \frac{2}{5} \rightarrow \frac{8}{20} \\ - \frac{1}{4} \rightarrow - \frac{5}{20} \\ \hline \frac{3}{20} \end{array}$$

The denominators are 2 and 3.
Since $2 \times 3 = 6$, rename each number with a denominator of 6.

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

Write answers in simplest form.

Write each answer in simplest form.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\begin{array}{r} 7\frac{4}{5} \\ - 6\frac{7}{12} \\ \hline \end{array}$$

Perfect score: 16 My score: _____

Second Long Division

Name: _____
Color: _____
Date: _____

Show all of your work to solve the following division problems.

1. $\frac{22.05}{3}$

2. $\frac{495}{25}$

3. $\frac{45,216}{9}$

4. $\frac{2000}{6}$

5. $\frac{450}{11}$

6. $\frac{81.4}{4}$

7. $\frac{330}{25}$

8. $\frac{222}{15}$