

Mixed Numbers

Add by parts. Use the least common denominator.

Add the wholes. Rewrite the fractions, then add them.

Example

$$1\frac{1}{4} + 2\frac{1}{3} = \boxed{3} + \frac{\boxed{3}}{\boxed{12}} + \frac{\boxed{4}}{\boxed{12}} = \boxed{3\frac{7}{12}}$$

1.

$$3\frac{2}{5} + 4\frac{1}{4} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

2.

$$1\frac{1}{12} + 2\frac{1}{4} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

3.

$$2\frac{1}{6} + 3\frac{3}{10} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

The fractions make more than 1. Rename, then add.

Example



$$2\frac{3}{4} + 1\frac{1}{3} = \boxed{3} + \frac{\boxed{9}}{\boxed{12}} + \frac{\boxed{4}}{\boxed{12}} = \boxed{3} + \frac{\boxed{13}}{\boxed{12}} = \boxed{4\frac{1}{12}}$$

4.

$$1\frac{5}{6} + 2\frac{3}{8} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

5.

$$3\frac{4}{5} + 1\frac{1}{2} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

6.

$$2\frac{2}{3} + 4\frac{7}{12} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Mixed Numbers

Add in columns. Rewrite, add, then simplify and rename.

Rewrite both fractions with the least common denominator. Then add.

Example

Rewrite

$$\begin{array}{r}
 1\frac{3}{4} = 1\frac{\boxed{9}}{\boxed{12}} \\
 + 2\frac{5}{12} = 2\frac{\boxed{5}}{\boxed{12}} \\
 \hline
 \boxed{3}\frac{\boxed{14}}{\boxed{12}} = \boxed{4}\frac{\boxed{1}}{\boxed{6}}
 \end{array}$$

Simplest form

$$\begin{array}{r}
 1. \quad 3\frac{1}{2} = 3\frac{\boxed{}}{\boxed{}} \\
 + 2\frac{3}{10} = 2\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

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

$$\begin{array}{r}
 3. \quad 2\frac{7}{10} = 2\frac{\boxed{}}{\boxed{}} \\
 + 3\frac{5}{6} = 3\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

$$\begin{array}{r}
 4. \quad 1\frac{5}{12} = 1\frac{\boxed{}}{\boxed{}} \\
 + 5\frac{1}{4} = 5\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

$$\begin{array}{r}
 5. \quad 2\frac{5}{9} = 2\frac{\boxed{}}{\boxed{}} \\
 + 1\frac{2}{3} = 1\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

Mixed Numbers

Subtract by parts. Use the least common denominator.

Subtract the wholes. Rewrite the fractions, then subtract.

Example

$$5\frac{3}{5} - 2\frac{1}{2} = \boxed{3} + \frac{\boxed{6}}{\boxed{10}} - \frac{\boxed{5}}{\boxed{10}} = \boxed{3\frac{1}{10}}$$

$$1. \quad 7\frac{7}{10} - 3\frac{1}{4} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

$$2. \quad 4\frac{11}{12} - 1\frac{3}{8} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

$$3. \quad 8\frac{7}{10} - 5\frac{1}{5} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

$$4. \quad 9\frac{3}{4} - 4\frac{7}{12} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Subtract. Show your work. Write the answer in simplest form.

$$5. \quad 6\frac{4}{5} - 2\frac{1}{4} =$$

$$6. \quad 6\frac{5}{8} - 3\frac{1}{2} =$$

$$7. \quad 7\frac{2}{3} - 5\frac{2}{9} =$$

$$8. \quad 3\frac{9}{10} - 1\frac{1}{6} =$$

$$9. \quad 10\frac{5}{12} - 4\frac{1}{3} =$$

$$10. \quad 9\frac{6}{7} - 2\frac{1}{2} =$$

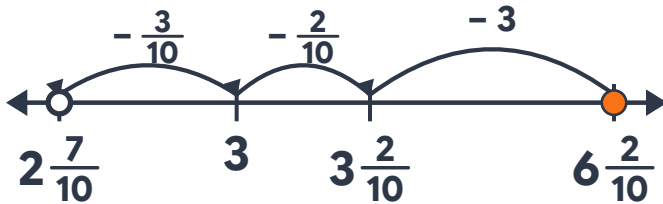
Mixed Numbers

Use the least common denominator. Trade 1 whole if needed.

The top fraction is too small. Trade 1 whole, then subtract.

Example

Count back through a whole



$$\begin{array}{r}
 \text{Rewrite} \qquad \qquad \text{Trade 1 whole} \\
 6\frac{1}{5} = 6\frac{\boxed{2}}{\boxed{10}} = \boxed{5}\frac{\boxed{12}}{\boxed{10}} \\
 - 3\frac{1}{2} = 3\frac{\boxed{5}}{\boxed{10}} = \boxed{3}\frac{\boxed{5}}{\boxed{10}} \\
 \hline
 \boxed{2}\frac{\boxed{7}}{\boxed{10}}
 \end{array}$$

$$\begin{array}{r}
 1. \quad 7\frac{1}{8} = 7\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 - 2\frac{2}{3} = 2\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}}
 \end{array}$$

$$\begin{array}{r}
 2. \quad 8\frac{3}{10} = 8\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 - 1\frac{3}{4} = 1\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}}
 \end{array}$$

Trade 1 whole from the top number first. Then subtract.

Example

$$6 - 2\frac{5}{12} = \boxed{3}\frac{\boxed{7}}{\boxed{12}}$$

$$6 = \boxed{5}\frac{\boxed{12}}{\boxed{12}}$$

$$3. \quad 7\frac{3}{8} - 3\frac{3}{4} = \boxed{}$$

$$7\frac{3}{8} = \boxed{}\frac{\boxed{}}{\boxed{}}$$

$$4. \quad 9 - 4\frac{3}{10} = \boxed{}$$

$$9 = \boxed{}\frac{\boxed{}}{\boxed{}}$$

$$5. \quad 8\frac{1}{10} - 2\frac{3}{5} = \boxed{}$$

$$8\frac{1}{10} = \boxed{}\frac{\boxed{}}{\boxed{}}$$

Mixed Numbers

Estimate first. Then solve and check the work.

Round each number to the nearest whole to estimate. Then solve.

Example

$$3\frac{5}{6} + 2\frac{1}{8}$$

Estimate

$$4 + 2 = 6$$

Answer:

$$5\frac{23}{24}$$

$$1. \quad 6\frac{1}{10} - 2\frac{2}{3}$$

Estimate

$$\square - \square = \square$$

Answer:

$$2. \quad 4\frac{7}{12} + 3\frac{3}{5}$$

Estimate

$$\square + \square = \square$$

Answer:

Is it right? Circle any mistake. Write the right answer in the box.

Example

$$6\frac{2}{5} - 3\frac{3}{4} = 6\frac{8}{20} - 3\frac{15}{20} = 3\frac{7}{20}$$

Yes

No

$$2\frac{13}{20}$$

$\frac{8}{20}$ is less than $\frac{15}{20}$, so trade 1 whole first.

$$3. \quad 1\frac{3}{5} + 2\frac{1}{4} = 3\frac{4}{9}$$

Yes

No

$$4. \quad 2\frac{5}{8} + 3\frac{2}{3} = 2\frac{15}{24} + 3\frac{16}{24} = 6\frac{7}{24}$$

Yes

No

Estimate first. Then solve. Write the answer in simplest form.

5. Lena hikes $2\frac{3}{4}$ miles before lunch and $1\frac{7}{10}$ miles after lunch. How far does she hike in all?

Estimate: _____

miles

6. A bag holds $5\frac{1}{3}$ pounds of rice. Dad uses $1\frac{5}{8}$ pounds for a big dinner. How much rice is left?

Estimate: _____

pounds

Mixed Numbers

Add by parts. Use the least common denominator.

Add the wholes. Rewrite the fractions, then add them.

Example

$$1\frac{1}{4} + 2\frac{1}{3} = \boxed{3} + \frac{\boxed{3}}{\boxed{12}} + \frac{\boxed{4}}{\boxed{12}} = \boxed{3\frac{7}{12}}$$

1.

$$3\frac{2}{5} + 4\frac{1}{4} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

2.

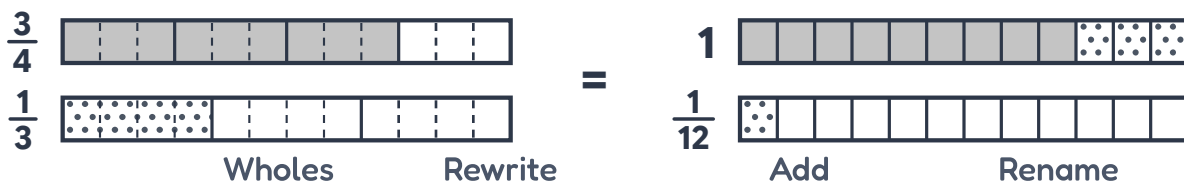
$$1\frac{1}{12} + 2\frac{1}{4} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

3.

$$2\frac{1}{6} + 3\frac{3}{10} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

The fractions make more than 1. Rename, then add.

Example



$$2\frac{3}{4} + 1\frac{1}{3} = \boxed{3} + \frac{\boxed{9}}{\boxed{12}} + \frac{\boxed{4}}{\boxed{12}} = \boxed{3} + \frac{\boxed{13}}{\boxed{12}} = \boxed{4\frac{1}{12}}$$

4.

$$1\frac{5}{6} + 2\frac{3}{8} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

5.

$$3\frac{4}{5} + 1\frac{1}{2} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

6.

$$2\frac{2}{3} + 4\frac{7}{12} = \boxed{} + \frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{\boxed{}} = \boxed{} + \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Mixed Numbers

Add in columns. Rewrite, add, then simplify and rename.

Rewrite both fractions with the least common denominator. Then add.

Example

Rewrite

$$\begin{array}{r}
 1\frac{3}{4} = 1\frac{\boxed{9}}{\boxed{12}} \\
 + 2\frac{5}{12} = 2\frac{\boxed{5}}{\boxed{12}} \\
 \hline
 \boxed{3}\frac{\boxed{14}}{\boxed{12}} = \boxed{4}\frac{\boxed{1}}{\boxed{6}}
 \end{array}$$

Simplest form

$$\begin{array}{r}
 1. \quad 3\frac{1}{2} = 3\frac{\boxed{}}{\boxed{}} \\
 + 2\frac{3}{10} = 2\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

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

$$\begin{array}{r}
 3. \quad 2\frac{7}{10} = 2\frac{\boxed{}}{\boxed{}} \\
 + 3\frac{5}{6} = 3\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

$$\begin{array}{r}
 4. \quad 1\frac{5}{12} = 1\frac{\boxed{}}{\boxed{}} \\
 + 5\frac{1}{4} = 5\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

$$\begin{array}{r}
 5. \quad 2\frac{5}{9} = 2\frac{\boxed{}}{\boxed{}} \\
 + 1\frac{2}{3} = 1\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}} = \boxed{}
 \end{array}$$

Mixed Numbers

Subtract by parts. Use the least common denominator.

Subtract the wholes. Rewrite the fractions, then subtract.

Example

$$5\frac{3}{5} - 2\frac{1}{2} = \boxed{3} + \frac{\boxed{6}}{\boxed{10}} - \frac{\boxed{5}}{\boxed{10}} = \boxed{3\frac{1}{10}}$$

1.

$$7\frac{7}{10} - 3\frac{1}{4} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

2.

$$4\frac{11}{12} - 1\frac{3}{8} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

3.

$$8\frac{7}{10} - 5\frac{1}{5} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

4.

$$9\frac{3}{4} - 4\frac{7}{12} = \boxed{} + \frac{\boxed{}}{\boxed{}} - \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Subtract. Show your work. Write the answer in simplest form.

5. $6\frac{4}{5} - 2\frac{1}{4} =$

6. $6\frac{5}{8} - 3\frac{1}{2} =$

7. $7\frac{2}{3} - 5\frac{2}{9} =$

8. $3\frac{9}{10} - 1\frac{1}{6} =$

9. $10\frac{5}{12} - 4\frac{1}{3} =$

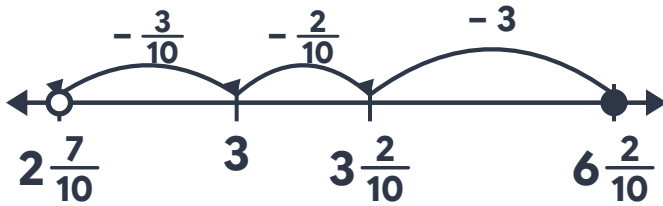
10. $9\frac{6}{7} - 2\frac{1}{2} =$

Mixed Numbers

Use the least common denominator. Trade 1 whole if needed.

The top fraction is too small. Trade 1 whole, then subtract.

Example Count back through a whole



$$\begin{array}{r}
 \text{Rewrite} \qquad \qquad \text{Trade 1 whole} \\
 6\frac{1}{5} = 6\frac{\frac{2}{10}}{\frac{10}{10}} = 5\frac{\frac{12}{10}}{\frac{10}{10}} \\
 - 3\frac{1}{2} = 3\frac{\frac{5}{10}}{\frac{10}{10}} = 3\frac{\frac{5}{10}}{\frac{10}{10}} \\
 \hline
 2\frac{\frac{7}{10}}{\frac{10}{10}}
 \end{array}$$

$$\begin{array}{r}
 1. \quad 7\frac{1}{8} = 7\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 - 2\frac{2}{3} = 2\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}}
 \end{array}$$

$$\begin{array}{r}
 2. \quad 8\frac{3}{10} = 8\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 - 1\frac{3}{4} = 1\frac{\boxed{}}{\boxed{}} = \boxed{}\frac{\boxed{}}{\boxed{}} \\
 \hline
 \boxed{}\frac{\boxed{}}{\boxed{}}
 \end{array}$$

Trade 1 whole from the top number first. Then subtract.

Example $6 - 2\frac{5}{12} = 3\frac{7}{12}$

$$6 = 5\frac{\frac{12}{12}}{\frac{12}{12}}$$

$$3. \quad 7\frac{3}{8} - 3\frac{3}{4} = \boxed{}$$

$$7\frac{3}{8} = \boxed{}\frac{\boxed{}}{\boxed{}}$$

$$4. \quad 9 - 4\frac{3}{10} = \boxed{}$$

$$9 = \boxed{}\frac{\boxed{}}{\boxed{}}$$

$$5. \quad 8\frac{1}{10} - 2\frac{3}{5} = \boxed{}$$

$$8\frac{1}{10} = \boxed{}\frac{\boxed{}}{\boxed{}}$$

Mixed Numbers

Estimate first. Then solve and check the work.

Round each number to the nearest whole to estimate. Then solve.

Example

$$3\frac{5}{6} + 2\frac{1}{8}$$

Estimate

$$4 + 2 = 6$$

Answer:

$$5\frac{23}{24}$$

$$1. \quad 6\frac{1}{10} - 2\frac{2}{3}$$

Estimate

$$\square - \square = \square$$

Answer:

$$2. \quad 4\frac{7}{12} + 3\frac{3}{5}$$

Estimate

$$\square + \square = \square$$

Answer:

Is it right? Circle any mistake. Write the right answer in the box.

Example

$$6\frac{2}{5} - 3\frac{3}{4} = 6\frac{8}{20} - 3\frac{15}{20} = 3\frac{7}{20}$$

Yes

No

$$2\frac{13}{20}$$

$\frac{8}{20}$ is less than $\frac{15}{20}$, so trade 1 whole first.

$$3. \quad 1\frac{3}{5} + 2\frac{1}{4} = 3\frac{4}{9}$$

Yes

No

$$4. \quad 2\frac{5}{8} + 3\frac{2}{3} = 2\frac{15}{24} + 3\frac{16}{24} = 6\frac{7}{24}$$

Yes

No

Estimate first. Then solve. Write the answer in simplest form.

5. Lena hikes $2\frac{3}{4}$ miles before lunch and $1\frac{7}{10}$ miles after lunch. How far does she hike in all?

Estimate: _____

miles

6. A bag holds $5\frac{1}{3}$ pounds of rice. Dad uses $1\frac{5}{8}$ pounds for a big dinner. How much rice is left?

Estimate: _____

pounds

Mixed Numbers

Add by parts. Use the least common denominator.

Add the wholes. Rewrite the fractions, then add them.

Example

$$1\frac{1}{4} + 2\frac{1}{3} = \boxed{3} + \frac{\boxed{3}}{\boxed{12}} + \frac{\boxed{4}}{\boxed{12}} = \boxed{3}\frac{\boxed{7}}{\boxed{12}}$$

$$1. \quad 3\frac{2}{5} + 4\frac{1}{4} = \boxed{7} + \frac{\boxed{8}}{\boxed{20}} + \frac{\boxed{5}}{\boxed{20}} = \boxed{7}\frac{\boxed{13}}{\boxed{20}}$$

$$2. \quad 1\frac{1}{12} + 2\frac{1}{4} = \boxed{3} + \frac{\boxed{1}}{\boxed{12}} + \frac{\boxed{3}}{\boxed{12}} = \boxed{3}\frac{\boxed{4}}{\boxed{12}}$$

$$3. \quad 2\frac{1}{6} + 3\frac{3}{10} = \boxed{5} + \frac{\boxed{5}}{\boxed{30}} + \frac{\boxed{9}}{\boxed{30}} = \boxed{5}\frac{\boxed{14}}{\boxed{30}}$$

The fractions make more than 1. Rename, then add.

Example



$$2\frac{3}{4} + 1\frac{1}{3} = \boxed{3} + \frac{\boxed{9}}{\boxed{12}} + \frac{\boxed{4}}{\boxed{12}} = \boxed{3} + \frac{\boxed{13}}{\boxed{12}} = \boxed{4}\frac{\boxed{1}}{\boxed{12}}$$

$$4. \quad 1\frac{5}{6} + 2\frac{3}{8} = \boxed{3} + \frac{\boxed{20}}{\boxed{24}} + \frac{\boxed{9}}{\boxed{24}} = \boxed{3} + \frac{\boxed{29}}{\boxed{24}} = \boxed{4}\frac{\boxed{5}}{\boxed{24}}$$

$$5. \quad 3\frac{4}{5} + 1\frac{1}{2} = \boxed{4} + \frac{\boxed{8}}{\boxed{10}} + \frac{\boxed{5}}{\boxed{10}} = \boxed{4} + \frac{\boxed{13}}{\boxed{10}} = \boxed{5}\frac{\boxed{3}}{\boxed{10}}$$

$$6. \quad 2\frac{2}{3} + 4\frac{7}{12} = \boxed{6} + \frac{\boxed{8}}{\boxed{12}} + \frac{\boxed{7}}{\boxed{12}} = \boxed{6} + \frac{\boxed{15}}{\boxed{12}} = \boxed{7}\frac{\boxed{1}}{\boxed{4}}$$

Mixed Numbers

Add in columns. Rewrite, add, then simplify and rename.

Rewrite both fractions with the least common denominator. Then add.

Example

Rewrite

$$\begin{array}{r}
 1\frac{3}{4} = 1\frac{9}{12} \\
 + 2\frac{5}{12} = 2\frac{5}{12} \\
 \hline
 3\frac{14}{12} = 4\frac{1}{6}
 \end{array}$$

Simplest form

$$\begin{array}{r}
 1. \quad 3\frac{1}{2} = 3\frac{5}{10} \\
 + 2\frac{3}{10} = 2\frac{3}{10} \\
 \hline
 5\frac{8}{10} = 5\frac{4}{5}
 \end{array}$$

$$\begin{array}{r}
 2. \quad 4\frac{2}{3} = 4\frac{10}{15} \\
 + 1\frac{3}{5} = 1\frac{9}{15} \\
 \hline
 5\frac{19}{15} = 6\frac{4}{15}
 \end{array}$$

$$\begin{array}{r}
 3. \quad 2\frac{7}{10} = 2\frac{21}{30} \\
 + 3\frac{5}{6} = 3\frac{25}{30} \\
 \hline
 5\frac{46}{30} = 6\frac{8}{15}
 \end{array}$$

$$\begin{array}{r}
 4. \quad 1\frac{5}{12} = 1\frac{5}{12} \\
 + 5\frac{1}{4} = 5\frac{3}{12} \\
 \hline
 6\frac{8}{12} = 6\frac{2}{3}
 \end{array}$$

$$\begin{array}{r}
 5. \quad 2\frac{5}{9} = 2\frac{5}{9} \\
 + 1\frac{2}{3} = 1\frac{6}{9} \\
 \hline
 3\frac{11}{9} = 4\frac{2}{9}
 \end{array}$$

Mixed Numbers

Subtract by parts. Use the least common denominator.

Subtract the wholes. Rewrite the fractions, then subtract.

Example

$$5\frac{3}{5} - 2\frac{1}{2} = \boxed{3} + \frac{\boxed{6}}{\boxed{10}} - \frac{\boxed{5}}{\boxed{10}} = \boxed{3\frac{1}{10}}$$

$$1. \quad 7\frac{7}{10} - 3\frac{1}{4} = \boxed{4} + \frac{\boxed{14}}{\boxed{20}} - \frac{\boxed{5}}{\boxed{20}} = \boxed{4\frac{9}{20}}$$

$$2. \quad 4\frac{11}{12} - 1\frac{3}{8} = \boxed{3} + \frac{\boxed{22}}{\boxed{24}} - \frac{\boxed{9}}{\boxed{24}} = \boxed{3\frac{13}{24}}$$

$$3. \quad 8\frac{7}{10} - 5\frac{1}{5} = \boxed{3} + \frac{\boxed{7}}{\boxed{10}} - \frac{\boxed{2}}{\boxed{10}} = \boxed{3\frac{1}{2}}$$

$$4. \quad 9\frac{3}{4} - 4\frac{7}{12} = \boxed{5} + \frac{\boxed{9}}{\boxed{12}} - \frac{\boxed{7}}{\boxed{12}} = \boxed{5\frac{1}{6}}$$

Subtract. Show your work. Write the answer in simplest form.

$$5. \quad 6\frac{4}{5} - 2\frac{1}{4} =$$

$$6\frac{16}{20} - 2\frac{5}{20}$$

$$\boxed{4\frac{11}{20}}$$

$$6. \quad 6\frac{5}{8} - 3\frac{1}{2} =$$

$$6\frac{5}{8} - 3\frac{4}{8}$$

$$\boxed{3\frac{1}{8}}$$

$$7. \quad 7\frac{2}{3} - 5\frac{2}{9} =$$

$$7\frac{6}{9} - 5\frac{2}{9}$$

$$\boxed{2\frac{4}{9}}$$

$$8. \quad 3\frac{9}{10} - 1\frac{1}{6} =$$

$$3\frac{27}{30} - 1\frac{5}{30}$$

$$\boxed{2\frac{11}{15}}$$

$$9. \quad 10\frac{5}{12} - 4\frac{1}{3} =$$

$$10\frac{5}{12} - 4\frac{4}{12}$$

$$\boxed{6\frac{1}{12}}$$

$$10. \quad 9\frac{6}{7} - 2\frac{1}{2} =$$

$$9\frac{12}{14} - 2\frac{7}{14}$$

$$\boxed{7\frac{5}{14}}$$

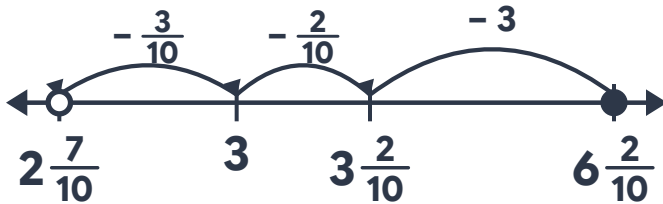
Mixed Numbers

Use the least common denominator. Trade 1 whole if needed.

The top fraction is too small. Trade 1 whole, then subtract.

Example

Count back through a whole



$$\begin{array}{r}
 \text{Rewrite} \qquad \qquad \text{Trade 1 whole} \\
 6\frac{1}{5} = 6\frac{\frac{2}{10}}{\frac{10}{10}} = 5\frac{\frac{12}{10}}{\frac{10}{10}} \\
 - 3\frac{1}{2} = 3\frac{\frac{5}{10}}{\frac{10}{10}} = 3\frac{\frac{5}{10}}{\frac{10}{10}} \\
 \hline
 2\frac{\frac{7}{10}}{\frac{10}{10}}
 \end{array}$$

$$\begin{array}{r}
 1. \quad 7\frac{1}{8} = 7\frac{\frac{3}{24}}{\frac{24}{24}} = 6\frac{\frac{27}{24}}{\frac{24}{24}} \\
 - 2\frac{2}{3} = 2\frac{\frac{16}{24}}{\frac{24}{24}} = 2\frac{\frac{16}{24}}{\frac{24}{24}} \\
 \hline
 4\frac{\frac{11}{24}}{\frac{24}{24}}
 \end{array}$$

$$\begin{array}{r}
 2. \quad 8\frac{3}{10} = 8\frac{\frac{6}{20}}{\frac{20}{20}} = 7\frac{\frac{26}{20}}{\frac{20}{20}} \\
 - 1\frac{3}{4} = 1\frac{\frac{15}{20}}{\frac{20}{20}} = 1\frac{\frac{15}{20}}{\frac{20}{20}} \\
 \hline
 6\frac{\frac{11}{20}}{\frac{20}{20}}
 \end{array}$$

Trade 1 whole from the top number first. Then subtract.

Example

$$\begin{array}{r}
 6 - 2\frac{5}{12} = 3\frac{7}{12} \\
 6 = 5\frac{\frac{12}{12}}{\frac{12}{12}}
 \end{array}$$

$$\begin{array}{r}
 3. \quad 7\frac{3}{8} - 3\frac{3}{4} = 3\frac{5}{8} \\
 7\frac{3}{8} = 6\frac{\frac{11}{8}}{\frac{8}{8}}
 \end{array}$$

$$\begin{array}{r}
 4. \quad 9 - 4\frac{3}{10} = 4\frac{7}{10} \\
 9 = 8\frac{\frac{10}{10}}{\frac{10}{10}}
 \end{array}$$

$$\begin{array}{r}
 5. \quad 8\frac{1}{10} - 2\frac{3}{5} = 5\frac{1}{2} \\
 8\frac{1}{10} = 7\frac{\frac{11}{10}}{\frac{10}{10}}
 \end{array}$$

Mixed Numbers

Estimate first. Then solve and check the work.

Round each number to the nearest whole to estimate. Then solve.

Example

$$3\frac{5}{6} + 2\frac{1}{8}$$

Estimate

$$4 + 2 = 6$$

Answer:

$$5\frac{23}{24}$$

$$1. \quad 6\frac{1}{10} - 2\frac{2}{3}$$

Estimate

$$6 - 3 = 3$$

Answer:

$$3\frac{13}{30}$$

$$2. \quad 4\frac{7}{12} + 3\frac{3}{5}$$

Estimate

$$5 + 4 = 9$$

Answer:

$$8\frac{11}{60}$$

Is it right? Circle any mistake. Write the right answer in the box.

Example

$$6\frac{2}{5} - 3\frac{3}{4} = 6\frac{8}{20} - 3\frac{15}{20} = 3\frac{7}{20}$$

Yes

No

$$2\frac{13}{20}$$

$\frac{8}{20}$ is less than $\frac{15}{20}$, so trade 1 whole first.

$$3. \quad 1\frac{3}{5} + 2\frac{1}{4} = 3\frac{4}{9}$$

Yes

No

$$3\frac{17}{20}$$

The denominators were added. Rewrite in 20ths first.

$$4. \quad 2\frac{5}{8} + 3\frac{2}{3} = 2\frac{15}{24} + 3\frac{16}{24} = 6\frac{7}{24}$$

Yes

No

$$6\frac{7}{24}$$

The work is right.

Estimate first. Then solve. Write the answer in simplest form.

5. Lena hikes $2\frac{3}{4}$ miles before lunch and $1\frac{7}{10}$ miles after lunch. How far does she hike in all?

Estimate: 5

$$4\frac{9}{20}$$

miles

6. A bag holds $5\frac{1}{3}$ pounds of rice. Dad uses $1\frac{5}{8}$ pounds for a big dinner. How much rice is left?

Estimate: 3

$$3\frac{17}{24}$$

pounds