

Add and Subtract Mixed Numbers

Adding Mixed Numbers

To add mixed numbers:

STEP 1 Add the whole numbers.

STEP 2 Add the fractional parts

$$\begin{array}{r} 8\frac{4}{3} \\ + 7\frac{3}{3} \\ \hline 15\frac{7}{3} = 16\frac{2}{3} \end{array}$$

STEP 3 If the fractional part is an improper fraction, regroup (express it as a mixed number and add to the whole number).

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

Subtracting Mixed Numbers

To subtract mixed numbers:

STEP 1 You'll want to subtract fractional parts, so first get a common denominator. Furthermore, if the fraction you are subtracting is larger than the first fraction, you need to regroup one from the whole number, and then subtract.

$$\begin{array}{r} 11\frac{2}{3} \rightarrow 11\frac{4}{6} \\ - 7\frac{1}{6} \rightarrow - 7\frac{1}{6} \\ \hline 4\frac{3}{6} = 4\frac{1}{2} \end{array}$$

$$\begin{array}{r} 16\frac{2}{9} \rightarrow 16\frac{2}{9} \rightarrow 15\frac{11}{9} \\ - 12\frac{2}{3} \rightarrow - 12\frac{6}{9} \rightarrow - 12\frac{6}{9} \\ \hline 3\frac{5}{9} \end{array}$$

STEP 2 Subtract the whole numbers.

STEP 3 Put the answer in lowest terms.