## Adding and Subtracting Mixed Numbers

Adding and subtracting mixed fractions with unlike denominators may seem impossible, but if you follow these three simple steps, you will be a pro!

-First, convert your mixed fraction to an improper fraction.
-Next, find a common denominator and add or subtract the fractions.
-Last, convert the answer back to a mixed fraction.
Quick Reminder: An improper fraction has a numerator that is greater than or equal to the denominator.

## Example: $\quad 3 \frac{1}{4}+2 \frac{1}{2}=$ ? <br> Convert to an improper fraction. <br> $$
\begin{array}{lcc} 3 \frac{1}{4}=\frac{13}{4} & \begin{array}{c} \text { Find a } \\ \text { common } \end{array} & \frac{13}{4} \\ 2 \frac{1}{2}=\frac{5}{2} & \text { denominator } & \frac{10}{4} \end{array}
$$ <br> \[ $$
\begin{gathered} \text { Now, add } \\ \text { them. } \end{gathered}
$$ \quad \frac{\mathbf{1 3}}{\mathbf{4}}+\frac{\mathbf{1 0}}{\mathbf{4}}=\frac{\mathbf{2 3}}{\mathbf{4}} \underset{$$
\begin{array}{c} \text { Convert } \\ \text { back to a } \\ \text { mixed fraction. } \end{array}
$$

{\mathbf{5} \frac{\mathbf{3}}{\mathbf{4}}}\]}

For each problem below, follow the steps used in the example to find your solution. Be sure to show all your work in the space provided.

1) $3 \frac{5}{8}+1 \frac{3}{4}=$ ?
$\frac{29}{8}+\frac{7}{4}$
$\frac{29}{8}+\frac{14}{8}=\frac{43}{8}=5 \frac{3}{8}$
2) $6 \frac{5}{6}-3 \frac{1}{4}=$ ?
$\frac{41}{6}-\frac{13}{4}$
$\frac{82}{12}-\frac{39}{12}=\frac{43}{12}=3 \frac{7}{12}$
3) $4 \frac{1}{3}+3 \frac{2}{5}=$ ?
$\frac{13}{3}+\frac{17}{5}$
$\frac{65}{15}+\frac{51}{15}=\frac{116}{15}=7 \frac{11}{15}$
4) $7 \frac{7}{8}-6 \frac{1}{4}=$ ?
$\frac{63}{8}-\frac{25}{4}$
$\frac{63}{8}-\frac{50}{8}=\frac{13}{8}=1 \frac{5}{8}$
5) $3 \frac{2}{3}+2 \frac{5}{7}=$ ?
$\frac{11}{3}+\frac{19}{7}$
$\frac{77}{21}+\frac{57}{21}=\frac{134}{21}=6 \frac{8}{21}$
6) $5 \frac{4}{5}-3 \frac{1}{3}=$ ?
$\frac{29}{5}-\frac{10}{3}$
$\frac{87}{15}-\frac{50}{15}=\frac{37}{15}=2 \frac{7}{15}$
7) $4 \frac{1}{4}+1 \frac{1}{3}=$ ?
$\frac{17}{4}+\frac{4}{3}$
$\frac{51}{12}+\frac{16}{12}=\frac{67}{12}=5 \frac{7}{12}$
8) $11 \frac{5}{6}-5 \frac{1}{2}=?$
$\frac{71}{6}-\frac{11}{2}$
$\frac{71}{6}-\frac{33}{6}=\frac{38}{6}=6 \frac{2}{6}=6 \frac{1}{3}$
