

ADD and SUBTRACT fractions

1. Check denominator. If the same +/- . If not the same, must find the LCM/LCD of the denominators.
2. Make equivalent fractions. The LCM/LCD will become the new denominator.

6 is a common multiple of 2 and 3.

$$\frac{1}{2} + \frac{1}{3}$$

Change fraction #1 to an equivalent fraction with a denominator of 6 - multiply top and bottom by 3.

$$\frac{1 \times 3}{2 \times 3} = \frac{3}{6}$$

Change fraction #2 to an equivalent fraction with the same denominator of 6 - multiply top and bottom by 2.

$$\frac{1 \times 2}{3 \times 2} = \frac{2}{6}$$

Remember whatever you multiply by the bottom you have to also do to the top.

3. ADD or SUBTRACT using your new fractions.
4. Reduce or convert if needed.

 VIDEO

Step 1: Write the improper fraction.

$$\frac{8}{5}$$

Step 2: Divide the numerator by the denominator.

$$5 \overline{) 8} \quad \begin{array}{l} 1 \text{ r } 3 \\ \underline{5} \\ 8 \end{array}$$

Step 3: The quotient becomes the whole number and the remainder is put over the denominator.

$$1 \frac{3}{5}$$

1. Find the LCD/LCM
2. Create equivalent fractions using the LCM/LCD.
3. Add the fractions (reduce or rename to mixed number in lowest terms).
4. Add the whole numbers $2\frac{1}{3} + 3\frac{3}{4}$
5. Put final answer together.

$$\frac{1 \times 4}{3 \times 4} = \frac{4}{12}$$

$$\frac{3 \times 3}{4 \times 3} = \frac{9}{12}$$

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

$$2 + 3 = 5$$

$$1\frac{1}{12} + 5 = 6\frac{1}{12}$$

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

$$\begin{array}{r}
 5 \\
 + \frac{5}{6} \\
 \hline
 5\frac{5}{6} \quad \text{SN4}
 \end{array}$$

$$\begin{array}{r}
 4\frac{2}{3} \times \frac{4}{4} = \frac{8}{2} \\
 + 3\frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \\
 \hline
 7
 \end{array}$$

$\frac{17}{12} \quad 12 \overline{) 17}$
 $\underline{-12}$
 5

$$\begin{array}{r}
 + 7 \\
 + 1\frac{5}{12} \\
 \hline
 8\frac{5}{12} \quad \text{SN 6}
 \end{array}$$

$$\begin{array}{r}
 4\frac{2}{3} \times \frac{4}{4} = \frac{8}{12} \\
 1\frac{1}{6} \times \frac{2}{2} = \frac{2}{12} \\
 + 3\frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \\
 \hline
 8
 \end{array}$$

$\frac{19}{12} \quad 12 \overline{) 19}$
 $\underline{-12}$
 7

$$\begin{array}{r}
 + 8 \\
 + 1\frac{7}{12} \\
 \hline
 9\frac{7}{12} \quad \text{SN 7}
 \end{array}$$