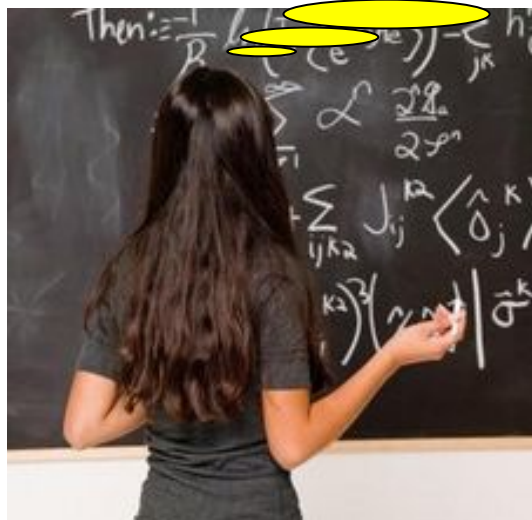


0.3

Subtracting Fractions w/ Regrouping

I wonder why so many kids forgot how to change a mixed number into an improper fraction...



To change a mixed number into an improper fraction:

$$9\frac{3}{5} = (9 \times 5) + 3 = \frac{48}{5}$$

Step 1

Get the denominators the same.

Step 2

Borrow from the whole number.

Step 3

Turn mixed number into an improper fraction.

Step 4

Subtract and simplify!

Example:

$$\begin{array}{r} 9\frac{1}{5} \rightarrow \frac{3}{15} \rightarrow 8 + 1\frac{3}{15} \rightarrow \frac{18}{15} \\ - 3\frac{2}{3} \rightarrow \frac{10}{15} \\ \hline 5\frac{8}{15} \end{array}$$

Special Examples:

If you don't have a fraction in the top number, like this...

$$\begin{array}{r} 3 \longrightarrow 2\frac{7}{7} \\ -1\frac{5}{7} \\ \hline 1\frac{2}{7} \end{array}$$

...change it into a mixed number with the same denominator as the number you are subtracting from.

$$\begin{array}{r} 6\frac{1}{3} \\ -4\frac{0}{3} \\ \hline 2\frac{1}{3} \end{array}$$

If the bottom number is whole, just bring down the fraction from the top number.