

Adding Mixed Numbers

$$3\frac{3}{4} + 2\frac{7}{8} =$$

1. Do I need a common denominator?

- **Yes, because I can't add fourths to eighths. But I know that 4 and 8 are in the same fact family so I can multiply $\frac{3}{4}$ by 2 to get $\frac{6}{8}$.**

$$3\frac{3}{4} \times \frac{2}{2} = 3\frac{6}{8} + 2\frac{7}{8} =$$

2. I add, working from right to left. I can set up my problem vertically or keep it horizontal.

- **First, add the fractions. $6+7=13$, the denominator never changes when we are just adding! Next, add the whole numbers $3+2=5$. Altogether we have $5\frac{13}{8}$. WE AREN'T DONE!**

$$\begin{array}{r} 3\frac{6}{8} \\ + 2\frac{7}{8} \\ \hline 5\frac{13}{8} \end{array}$$

3. Finally, I must fix the improper fraction!

$$\begin{array}{r} 5\frac{13}{8} - \frac{8}{8} = 5\frac{5}{8} \\ 5\frac{5}{8} + \frac{8}{8} = 6\frac{5}{8} \end{array}$$