Changing Improper Fractions into Mixed or Whole Numbers

Sometimes, you'll need to turn an improper fraction into a mixed number. To change an improper fraction, say $\frac{13}{2}$, into a mixed number, follow these steps:

1. Divide the denominator (2) into the numerator (13) to get the whole number portion (6) of the mixed number:

$$\begin{array}{r} 6 \\ 2\overline{)13} \\ \underline{12} \\ 1 \end{array}$$

2. Write the remainder of the division (1) over the old denominator (2): $6\frac{1}{2}$
3. Check: Change the mixed number back into an improper fraction (see the following section). If you end up with your original improper fraction, your answer is correct.

Changing Mixed Numbers into Improper Fractions

You must change mixed numbers into improper fractions when multiplying or dividing. To change a mixed number, say $2\frac{3}{4}$, into an improper fraction, follow these steps:

1. Multiply the whole number (2) by the denominator (4): $2 \times 4 = 8$
2. Add the result (8) to the numerator (3): $8 + 3 = 11$
3. Put the total (11) over the denominator (4): $\frac{11}{4}$
4. Check: Reverse the process by changing the improper fraction into a mixed number. If you get the number you started with, your answer is right.