

Mixed #'s & Improper Fractions

17

Mixed # - a whole # and a fraction $3\frac{1}{7}$

Improper Fraction – when the numerator is larger than the denominator (top heavy) $\frac{13}{3}$

Changing Mixed #'x to Improper Fractions

1. Multiply denominator by whole #
2. Add the numerator to that
3. Denominator stays the same

$$\text{EX. } 5\frac{2}{7} = \frac{5 \times 7 + 2}{7} = \boxed{\frac{37}{7}}$$

$$7\frac{3}{8} = \frac{7 \times 8 + 3}{8} = \boxed{\frac{59}{8}}$$

$$3\frac{4}{5} = \frac{3 \times 5 + 4}{5} = \boxed{\frac{19}{5}}$$

$$2\frac{5}{9} = \frac{2 \times 9 + 5}{9} = \boxed{\frac{23}{9}}$$

Changing Improper Fractions to Mixed #'s

1. Divide numerator by denominator
* B.O. (bottom # outside of $\overline{\hspace{1cm}}$)
2. Quotient is the whole #
Remainder is the numerator
Denominator stays the same

$$\text{EX. } \frac{25}{2} \rightarrow \begin{array}{r} 12 \\ 2 \overline{)25} \\ \underline{2} \\ 5 \\ \underline{4} \\ \textcircled{1} \end{array} \rightarrow 12\frac{1}{2}$$

$$\text{EX. } \frac{29}{8} \rightarrow \begin{array}{r} 3 \\ 8 \overline{)29} \\ \underline{24} \\ \textcircled{5} \end{array} \rightarrow 3\frac{5}{8}$$

$$\text{EX. } \frac{17}{5} \rightarrow \begin{array}{r} 3 \\ 5 \overline{)17} \\ \underline{15} \\ \textcircled{2} \end{array} \rightarrow 3\frac{2}{5}$$

$$\text{EX. } \frac{53}{4} \rightarrow \begin{array}{r} 13 \\ 4 \overline{)53} \\ \underline{4} \\ 13 \\ \underline{12} \\ \textcircled{1} \end{array} \rightarrow 13\frac{1}{4}$$