

Converting Rational #'s

I. Rational #'s

A. A # that can be written as a fraction.

B. Fractions are division problems.

Second Story

ex: $\frac{3}{8} = 3 \text{ divided by } 8$

First Story (Front Door)

Terminating

II. Mixed #'s

A. Two Methods

i. Changing to an improper fraction, then divide.

ex: $9\frac{4}{25} = \frac{229}{25}$

$$\begin{array}{r}
 9.16 \\
 \hline
 25 \overline{) 229.00} \\
 \underline{- 225} \\
 40 \\
 \underline{- 25} \\
 150 \\
 \underline{- 150} \\
 00 \\
 \hline
 0
 \end{array}$$

• 2nd Method:

- Only convert the fraction portion to a decimal.

ex: $9\frac{4}{25}$

$$\begin{array}{r}
 9.16 \\
 \hline
 25 \overline{) 4.0000} \\
 \underline{- 25} \\
 150 \\
 \underline{- 150} \\
 0000 \\
 \hline
 0
 \end{array}$$

9.16

III. Terminating or Repeating Decimal

A. Terminating: a decimal that ends.

B. Repeating: the decimal repeats itself

ex: $\frac{5}{12} =$

$$\begin{array}{r}
 12 \overline{) 5.0000} \\
 \underline{48} \\
 20 \\
 \underline{20} \\
 80 \\
 \underline{80} \\
 80 \\
 \underline{80} \\
 80
 \end{array}$$

.41 $\overline{6}$
Repeating