Chapter 1 Lesson 3
Rates

Rate – ratios that compare 2 quantities measured with DIFFERENT units

Ex: \$12 for 3 pounds

Unit Rate – rate for one unit of a given quantity (DENOMINATOR OF 1)

$$\frac{\$12}{3 \text{ pounds}} = \frac{\$4}{1 \text{ pound}}$$

÷3 ÷3

$\frac{\$4}{1 \text{ pound}}$

Examples:

40 pages in 8 days

$$\frac{40 \text{ pages}}{8 \text{ days}} = \frac{5 \text{ pages}}{1 \text{ day}}$$

÷8 ÷8

$\frac{5 \text{ pages}}{1 \text{ day}}$

Mr. Gonzales spends $135 for 5 bags of groceries. How much does he spend per bag of groceries, if each bag costs the same?

$$\frac{\$135}{5\text{ bags}} \xrightarrow{\div 5} \frac{\$27}{1\text{ bag}}$$

$$\frac{\$27}{1\text{ bag}}$$

Ms. Terry travels by train to see famous theme parks. She travels a distance of 728 miles in 8 hours. If the train maintains a constant speed, how many miles does she travel in one hour?

$$\frac{728\text{ miles}}{8\text{ hours}} \xrightarrow{\div 8} \frac{91\text{ miles}}{1\text{ hour}}$$

$$\frac{91\text{ miles}}{1\text{ hour}}$$

$$\begin{array}{r} 91 \\ 8\overline{)728} \\ -72\downarrow \\ \hline 08 \\ -8 \\ \hline 0 \end{array}$$