

RATES AND UNIT RATES

A **rate** is a ratio of values that represents different units of measure.

EXAMPLE: An 8-pack of 20 oz. sodas for \$5.98

A **unit rate** describes how many units of the first quantity corresponds to ONE unit of the second quantity (per one).

EXAMPLE: An 8-pack of 20 oz. sodas \div \$5.98 = \$0.74, or about 75 cents per one bottle

Unit rates are used frequently in our daily lives. For example, we use unit rates to make price comparisons at the grocery store to find the best deals.

To find a unit rate when given a rate, identify what two values are being compared and then use division.

EXAMPLE 1: 300 miles traveled in 4 hours

This is a rate comparing miles to hours. To find the unit rate, calculate "miles per hour."

$$300 \text{ miles} \div 4 \text{ hours} = \frac{75 \text{ miles}}{1 \text{ hour}}$$

EXAMPLE 2: 750 words spoken in 5 minutes

This rate is comparing words to minutes. To find the unit rate, calculate "words per minute."

$$750 \text{ words} \div 5 \text{ minutes} = \frac{150 \text{ words}}{1 \text{ minute}}$$

Unit Rate Examples

Miles per hour
Meters per second
Dollars per gallon
Dollars per hour

