

2/1/10

Objective:

TSWBAT find and
use rates.



Vocabulary:

rate: a ratio that compares two quantities measured in different units.

unit rate: the rate of one unit of any given quantity.

unit price: a unit rate that gives the cost per unit.

Finding Unit Rate

Find the unit rate for 420 Calories in 6 servings.

1. divide the first quantity by the second quantity.

420 calories
6 servings

$$\begin{array}{r} 70 \\ 6 \overline{) 420} \end{array}$$

2. write that quantity over 1 unit on the bottom.

$$\frac{70 \text{ calories}}{1 \text{ serving}}$$

Practice:

Find the unit rate.

1. 66 pages read in 2 hours.

$$\frac{33 \text{ pages}}{1 \text{ hour}}$$

2. \$2.37 for 3 pounds of grapes.

$$\frac{\$0.79}{1 \text{ pound}}$$

Using Unit Rates

A car travels 25 miles on 1 gallon of gas. How far can it travel on eight gallons of gas?

1. write the unit rate as a ratio.

$\frac{25 \text{ miles}}{1 \text{ gallon}}$

2. find an equal ratio.

$$\frac{25 \text{ m}}{1 \text{ g}} \overset{\times 8}{=} \frac{200 \text{ m}}{8 \text{ g}} \underset{\times 8}{}$$

Practice:

Find the equal ratio.

1. You can earn \$5.25 in an hour. How much can you earn in 5 hours?

$$\frac{\$5.25}{1 \text{ h}} \overset{\times 5}{=} \frac{\$26.25}{5 \text{ h}} \underset{\times 5}{}$$

2. You can type 25 words in 1 minute. How many words can you type in 10 minutes?

$$\frac{25 \text{ words}}{1 \text{ min}} \overset{\times 10}{=} \frac{250 \text{ words}}{10 \text{ min}} \underset{\times 10}{}$$

Comparing Unit Prices

32 fl oz of sports drink cost \$1.29.

24 fl oz of sports drink cost \$1.20.

Which size sports drink is a better buy? Round each unit price to the nearest cent.

1. find each unit price.

$$\frac{\$1.29}{32 \text{ fl oz}} = \frac{\$0.04}{1 \text{ fl oz}} \quad \frac{\$1.20}{24 \text{ fl oz}} = \frac{\$0.05}{1 \text{ fl oz}}$$

2. compare.

$$\frac{\$0.04}{1 \text{ fl oz}} \quad \frac{\$0.05}{1 \text{ fl oz}}$$

Better Buy

Practice:

Homework

Reteach 6-2

