

- **Please take the chairs down**
- **lunch is Hot dog and taco bar**

Welcome Back

1. Tape in notes from the front table

$$\begin{array}{l} 162 : 9 = 18 \\ 18 : 1 = 18 \end{array}$$

2. Get out you break packet if you did it

$$162 \div 9 = 18$$

18 people: 1min

3. Problem of the day

A roller coaster can take 162 passengers around the track in 9 minutes. The roller coaster operates at a constant rate. How many passengers can the roller coaster take around the track per minute?

Module 7 Lesson 1

I will be able to solve problems with proportions.

Proportion:

A statement that two ratios or rates are equivalent

Example: 5:6 and 10:12

How to solve:

Cross Multiply and Divide

$$\frac{5}{6} = \frac{10}{x}$$

$$6 \times 10 = 60$$
$$60 \div 5 = 12$$

Scale Drawing

A drawing of a real object that is proportionally smaller or larger than the real object

Examples: maps, people, construction-blue
planets, parts of a car, prototypes, prints,
insects, designs, molecules,
atom,



Practice 1:

The Millers drove 105 miles on 4 gallons of gas. At this rate, how many miles can they drive on 6 gallons of gas?

$$\frac{105 \text{ mil}}{4 \text{ gal}} \rightarrow \frac{X \text{ mil}}{6 \text{ gal}}$$

$$\begin{array}{r} 15 \\ 4 \overline{) 630.0} \\ \underline{-4} \\ 23 \\ \underline{-20} \\ 30 \\ \underline{-30} \\ 0 \end{array}$$

$$105 \times 6 = 630$$
$$630 \div 4 = 157.5$$

157.5 miles
with 6 gal

Practice 2

There are 180 calories in 3 scoops of vanilla ice cream. How many calories are there in 7 scoops of ice cream?

$$\frac{180 \text{ cal}}{3 \text{ s.}} \rightarrow \frac{X}{7 \text{ s.}}$$

$$180 \times 7 = 1260$$

$$1260 \div 3 = 420$$

$$\text{420 cal}$$

Practice 3:

Jeremy drove his motorcycle 120 miles in 3 hours. At this rate, how many miles can he drive in 5 hours? At what rate did he drive his motorcycle?

$$\frac{120 \text{ mi}}{3 \text{ hr}} \rightarrow \frac{x}{5 \text{ hr}}$$

$$\frac{120 \text{ mi}}{3 \text{ hr}} \rightarrow \frac{\quad}{1 \text{ hr}}$$

$$120 \times 5 = 600$$
$$600 \div 3 = 200$$

$$200 \text{ miles}$$

$$120 \times 1 = 120$$

$$120 \div 3 = 40 \text{ miles}$$

Practice 4:

The scale on a map is 1 inch = 20 miles. On the map Greenville and North valley are 4.5 inches apart. How far is the actual distance?

$$\frac{1 \text{ in}}{20 \text{ mi}} \rightarrow \frac{4.5 \text{ in}}{x}$$

$$20 \times 4.5 = 90$$

$$90 \div 1 = 90 \text{ miles}$$