

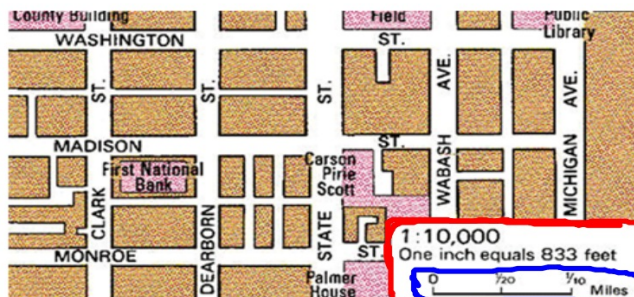
MATH 7R

# JANUARY 27, 2012

NOTHING TO CORRECT TODAY SO... GET OUT YOUR NOTES!



## 1/27 - Scale Model and Map Problems using Proportion



can't use the  
 $1" = 833'$   
part

The scale is:

Big things shrunk  
down  
Large object reduced

can use since it  
got bigger too

Find the ~~x~~ distance between Milton and Centerville if they are 4 cm apart on a map with a scale of 2 cm : 5 km.

$$\frac{2\text{cm}}{5\text{km}} = \frac{4\text{cm}}{x}$$

$$10\text{ km} = x$$

← labels match  
←

Johnstown and Ashville are 20 mi from each other. How far apart would the cities be on a map that has a scale of 2 in : 5 mi?

$$\frac{2 \text{ in} \cdot 4}{5 \text{ mi} \cdot 4} = \frac{x}{20 \text{ mi}}$$

$$8 \text{ in} = x$$



A diecast 1:10 scale Doepke Toys Jaguar XK120 from 1955. One of two car models the company made, this model is 17.5 in (440 mm) long. (in The Children's Museum of Indianapolis)

How big is the original?

$$\begin{array}{r} \text{model} \\ 1 \\ \hline 10 \end{array} \times \begin{array}{r} 17.5 \\ \hline x \end{array}$$

Real car

$$1x = 175$$

$$x = 175 \text{ in} \\ (14.6 \text{ ft})$$

A model plane is 6 cm tall. If it was built with a scale of 2 cm : 5 m then how tall is the real plane?

$$\frac{2\text{cm}}{5\text{m}} = \frac{6\text{cm}}{x}$$
$$15\text{m} = x$$

A model igloo has a scale of 4 in : 8 ft. If the real igloo is 16 ft wide then how wide is the model igloo?

$$\frac{4 \text{ in} \cdot 2}{8 \text{ ft} \cdot 2} = \frac{x}{16 \text{ ft}}$$

$$8 \text{ in} = x$$

# HOMEWORK

Green WORKSHEET 4

DUE Tuesday