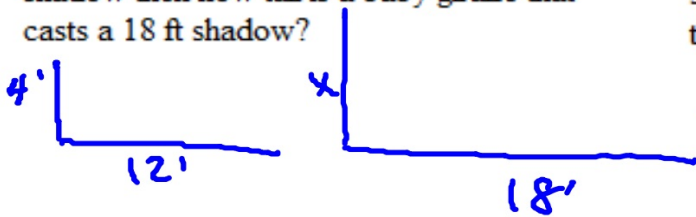


NOVEMBER 7, 2011

WARM-UP

3pts each

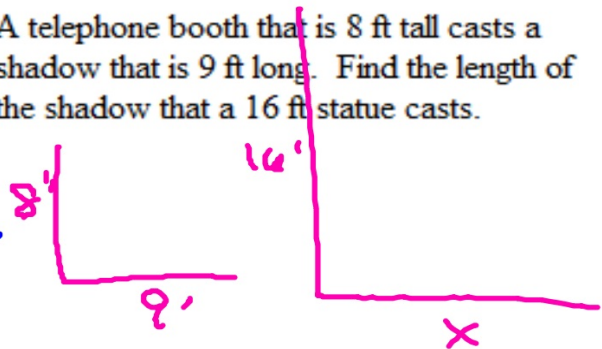
- 1) If a 4 ft tall cardboard box casts a 12 ft long shadow then how tall is a baby giraffe that casts a 18 ft shadow?



$$\frac{4}{12} = \frac{x}{18}$$

$$6' = x$$

- 2) A telephone booth that is 8 ft tall casts a shadow that is 9 ft long. Find the length of the shadow that a 16 ft statue casts.



$$\frac{8}{9} = \frac{16}{x}$$

$$18' = x$$

GET OUT YOUR HOMEWORK

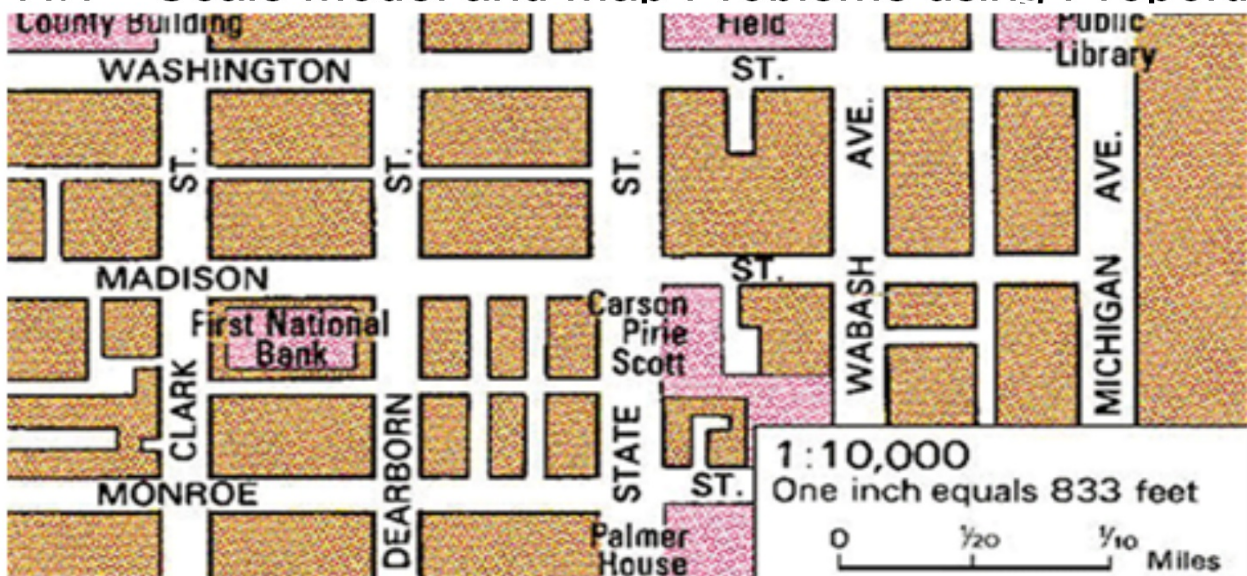
BLUE WORKSHEET ON SIMILAR FIGURES

$$\frac{x}{12} = \frac{21 \cdot 40}{21 \cdot 5}$$

$$x = 96$$

GREEN WORKSHEET (SHADOWS) IS DUE TUESDAY

11/7 - Scale Model and Map Problems using Proportion



The scale is: $1 \text{ to } 10,000$
 $\frac{1}{10,000}$

Find the distance between Greenwood and Madison on a map with a scale of $2 \text{ cm} : 10 \text{ km}$ if they are actually 40 km apart.

$$\frac{2 \text{ cm}}{10 \text{ km}} = \frac{x}{40 \text{ km}}$$

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

Victoria and Johnstown are 12 mi from each other. How far apart would the cities be on a map that has a scale of $2 \text{ in} : 3 \text{ mi}$?

$$\frac{2 \text{ in}}{3 \text{ mi}} = \frac{x}{12 \text{ mi}}$$

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



A diecast 1:10 scale Loepke 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](#))

17.5 in

1:10 scale

How big is the original?

$$\frac{1}{10} = \frac{17.5}{\boxed{175}}$$

model Real one

A model train is 30 in tall. If it was built with a scale of 5 in : 3 ft then how tall is the real train?

$$\frac{5 \text{ in} \cdot 6}{3 \text{ ft} \cdot 6} = \frac{30 \text{ in}}{x}$$

$$18 \text{ ft} = x$$

A model giraffe is 16 in tall. If it was built with a scale of 4 in : 3 ft then how tall is the real giraffe?

$$\frac{4 \text{ in} \cdot 4}{3 \text{ ft} \cdot 4} = \frac{16 \text{ in}}{x}$$

$$12 \text{ ft} = x$$

HOMWORK

Yellow WORKSHEET 5

DUE Tuesday
