

Name: \_\_\_\_\_

HW#: \_\_\_\_\_

1. If the ratio of a scale drawings dimensions to the original drawings dimensions is 1:5, is this an enlargement or a reduction? How do you know?
  
2. If the ratio of a scale drawing dimensions to the original drawings dimensions is 5:1, is this an enlargement or a reduction?
  
3. Write the scale factor for each example:
  - a. 2 ft model of a 3 yd. table
  - b. 6 in. model of a 6ft sofa
  
  - b. 40 c. model of a 5m tree
  - d. 8 cm model of a 24m. rocket
  
4. Walter has an 18in. model of a 42ft. Tyrannosaurus Rex. What scale factor does this represent?
  
  
5. A student is asked to find the scale factor that relates a 10 in. scale model to a 45 ft. building. She solves the problem by writing the following:

$$\frac{10 \text{ in}}{45 \text{ ft}} = \frac{2}{9}$$

What error did the student make? What is the correct scale factor?