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

**Similarity Review Sheet**

1. Given, find DE and CE.

 B D

 A E

C

6

4

10

A model of a building has a scale of 2 in to 15 ft.

1. If the model is 5 in tall, how tall is the actual building?

In the diagram, ΔCAT ~ΔDOG. Use the diagram to find each of the following.

1. Scale factor of ΔCAT to ΔDOG (Simplify if necessary)

 k = \_\_\_\_\_\_\_

 **35˚**

 **6**

**81˚**

**8**

**C**

**T**

**A**

**y**

1. Find x and y (Show Work!)

**x**

 **12**

**D**

**O**

**G**

**81˚**

 **15**

 x = \_\_\_\_\_\_\_\_\_\_ y = \_\_\_\_\_\_\_\_\_\_

1. Find m∠D = \_\_\_\_\_\_\_\_\_\_°
2. Find m∠O = \_\_\_\_\_\_\_\_\_\_°
3. Find the perimeter of ΔCAT = \_\_\_\_\_\_\_\_\_\_

 Find the perimeter of ΔDOG = \_\_\_\_\_\_\_\_\_\_

1. What is the ratio (scale factor) of the perimeter

of ΔCAT to the perimeter of ΔDOG? \_\_\_\_\_\_\_\_\_\_\_\_\_

1. A boy who is 5 ft. tall cast a shadow that is 12 ft long. At the same time, a building nearby cast a shadow that is 72 ft long. How tall is the building? Draw a picture!

Explain why the triangles are similar and write a similarity statement.

1. ABC~\_\_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_
2. RST~\_\_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_

1. ABC~\_\_\_\_\_\_\_\_\_\_ by \_\_\_\_\_\_

Determine which of the triangles (Δ DEF or ΔGHJ) is similar to ΔABC:

1. Complete the Similarity Statement to ΔABC ~ Δ \_\_\_\_\_\_\_\_\_\_\_\_
2. Find the Scale Factor from ΔABC to your answer from #13. = \_\_\_\_\_\_\_\_\_\_

Determine whether the dilation from Figure A to Figure B is a reduction or an enlargement. Then find its scale factor and simplify if possible.

1.

**A**

**B**

 b)

 Reduction or enlargement? Reduction or enlargement?

 scale factor = \_\_\_\_\_\_\_\_\_\_ scale factor = \_\_\_\_\_\_\_\_\_\_