

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

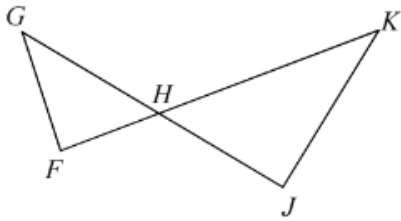
Unit 6: Similar Triangles

Date: \_\_\_\_\_ Bell: \_\_\_\_\_

Homework 2: Similar Figures

**Directions:** List all congruent angles and write a proportion that relates the corresponding sides.

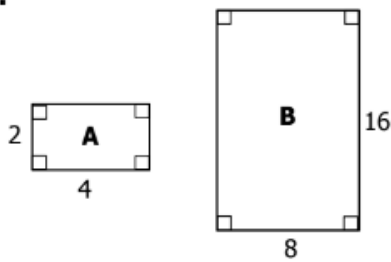
1.  $\triangle FGH \sim \triangle JKH$



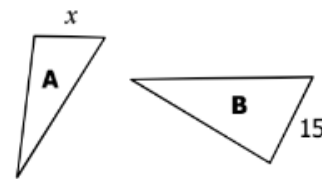
Angles	Sides

**Directions:** The pairs of polygons below are similar. Give the scale factor of figure A to figure B.

2.



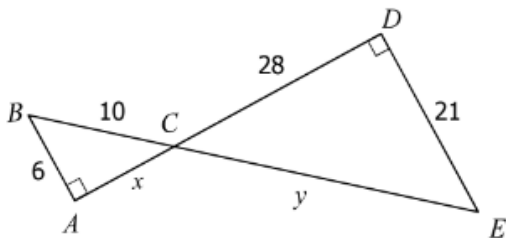
3. If the scale factor of figure A to figure B is 4:5, find the value of  $x$ .



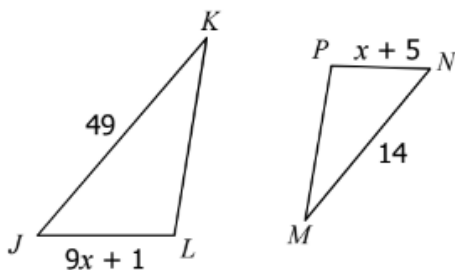
4. If the scale factor of figure A to figure B is 7:2, find the perimeter of figure A.



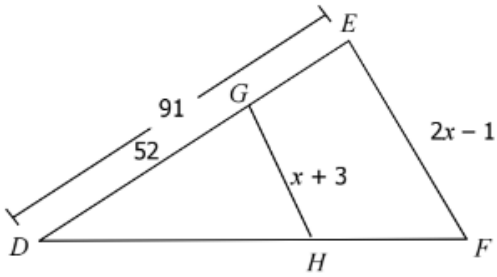
5. If  $\triangle ABC \sim \triangle DEC$ , find the value of  $x$  and  $y$ .



6. If  $\triangle JKL \sim \triangle NMP$ , find the value of  $x$ .



7. If  $\triangle DGH \sim \triangle DEF$ , find the value of  $x$ .



8. You want to enlarge a 3 in.-by-5 in. photo. The paper you will print on is 8.5 in.-by-14 in. What is the largest size the photo can be?

9. For art class, you need to make a scale drawing of the Parthenon using the scale 1 in. = 5 ft. The Parthenon is 228 ft long. How long should you make the building in your scale drawing?

10. Ella is reading a map with a scale of 1 in. = 20 mi. On the map, the distance Ella must drive is 4.25 in. How many miles is this?