Name _____ Due Date _____ Hour _____
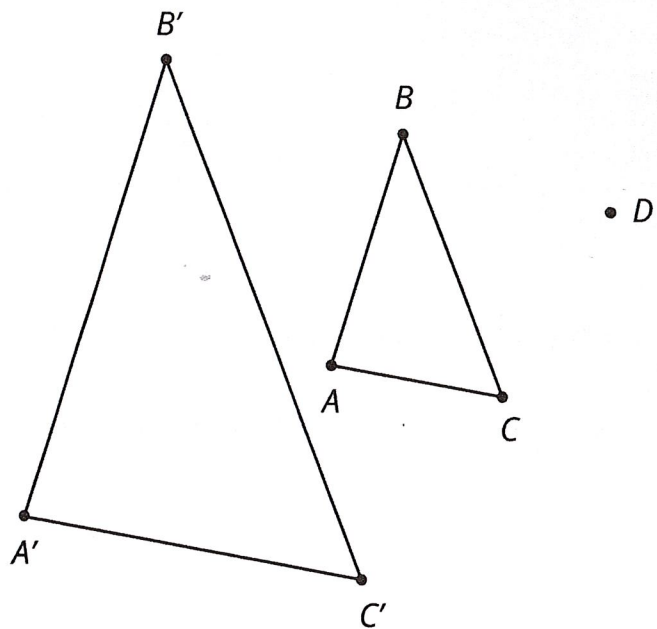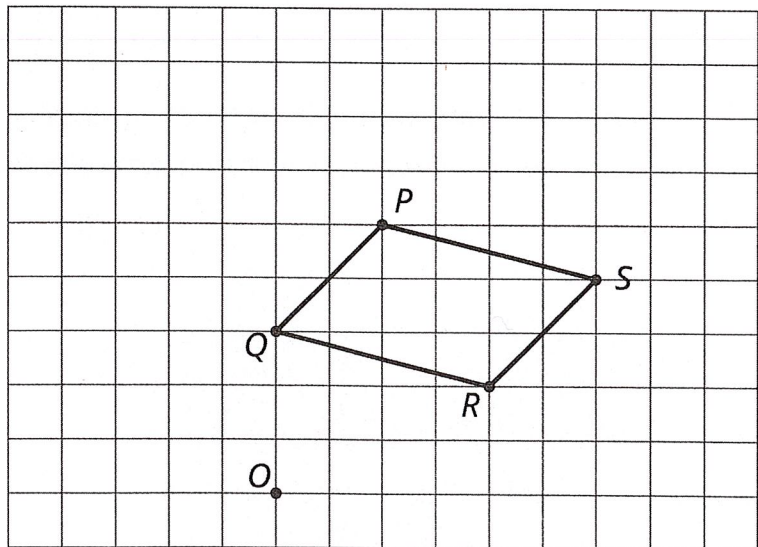
Lesson 4 Practice Problems

1. Triangle ABC is dilated using D as the center of dilation with scale factor 2.

The image is triangle $A'B'C'$. Clare says the two triangles are congruent, because their angle measures are the same. Do you agree? Explain how you know.
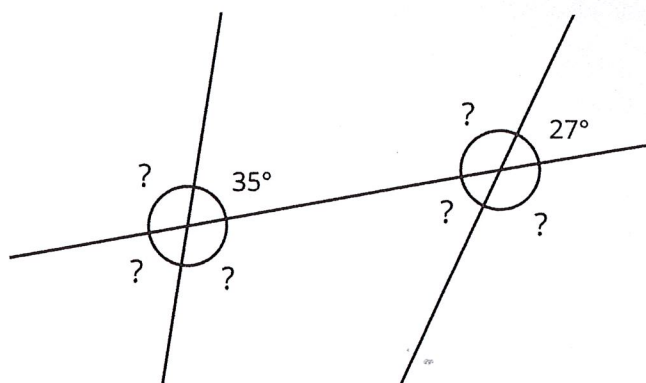

2. On graph paper, sketch the image of quadrilateral PQRS under the following dilations:

- The dilation centered at R with scale factor 2.
- The dilation centered at O with scale factor $\frac{1}{2}$.
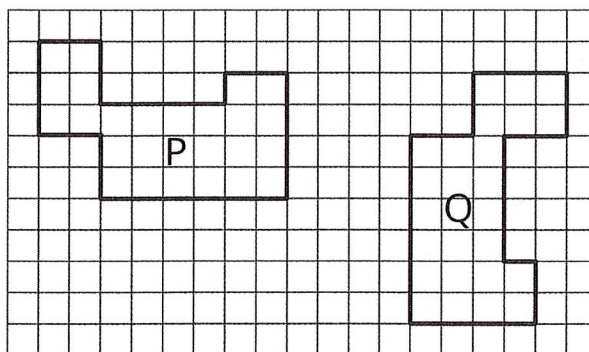- The dilation centered at S with scale factor $\frac{1}{2}$.

3. The diagram shows three lines with some marked angle measures.

Find the missing angle measures marked with question marks.

4. Describe a sequence of translations, rotations, and reflections that takes Polygon P to Polygon Q.

5. Point B has coordinates (-2, -5). After a translation 4 units down, a reflection across the y-axis, and a translation 6 units up, what are the coordinates of the image?