Name _____ Class _____ Date _____

Additional Practice

Lesson 1.08

Use the appropriate tools of a geometry software program.

1. Draw a scalene triangle and label each vertex.
   a. Move a vertex. Then move a different vertex. Which parts of the triangle change and which parts stay the same?
   b. Move a side. Which parts of the triangle change and which parts stay the same?
   c. Adjust the triangle so it again looks scalene. Construct a segment anywhere. Make it a reflection line. Select the entire triangle and reflect it. Label each new vertex.
   d. Move a vertex of the original triangle. Then move a side. What changes take place?
   e. Construct segments that connect the vertices of the original triangle to the corresponding vertices of its image. What seems to be the relationship between these segments? Does this relationship change if you move a side or an angle?

2. Draw a quadrilateral and label each vertex.
   a. Construct the midpoints of each side.
   b. Connect the midpoints to form a smaller quadrilateral. Label each of these vertices.
   c. Measure the length and the slopes of the sides of the smaller quadrilateral. What kind of quadrilateral does it seem to be?
   d. Measure the angles of the smaller quadrilateral. Do the measurements confirm your conjecture about the quadrilateral's type?
   e. Move a vertex and then move a side of the larger quadrilateral. Does your conjecture about the smaller quadrilateral remain the same?

3. Draw a triangle of any size.
   a. Construct a median of the triangle.
   b. Measure and record the lengths of the sides and the median, the measures of the angles, and the perimeter of the triangle.
   c. Change the scale of the triangle and remeasure each part in part (b).
   d. Compare the measures of the two triangles. Describe the ratios of corresponding parts.