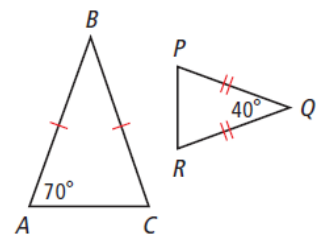
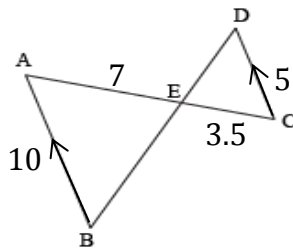
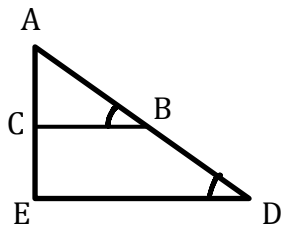


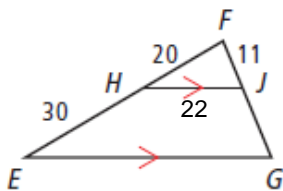
CHAPTER 7 – SIMILARITY REVIEW

- 1) If two polygons are similar, then their corresponding sides are _____ and their corresponding angles are _____. (7.1)
- 2) $\Delta FRI \sim \Delta DAY$. Given $m\angle F = 40^\circ$, $m\angle A = 80^\circ$, $FR = 4$, $RI = 3$, $FI = 6$, and $DA = 10$, find all other angle measures and side lengths. (Draw your own picture!) (7.1, 7.2)

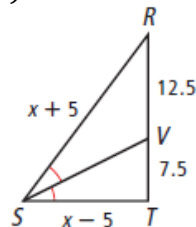
- 3) Determine if the triangles are similar. If they are, why so? If they are not, why not? (7.2)



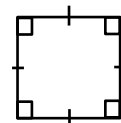
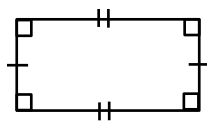
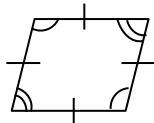
- 4) Find IG and EG. (7.3)



- 5) Find ST. (7.3)



- 6) Determine if the figures below are regular or irregular. (6.1)

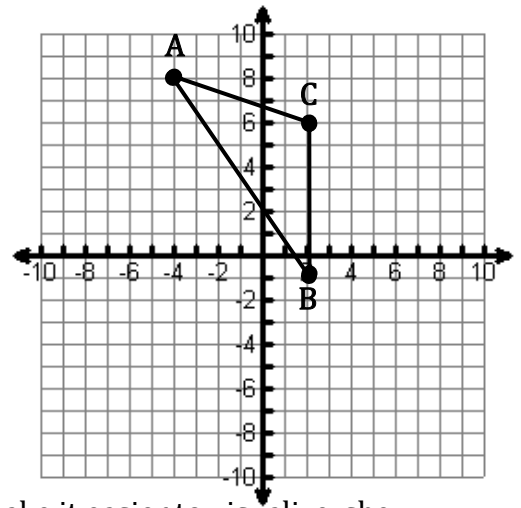


- 7) What is the sum of the interior angles of a regular nonagon? (6.1)

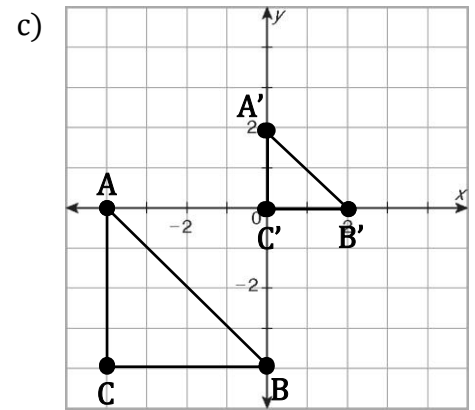
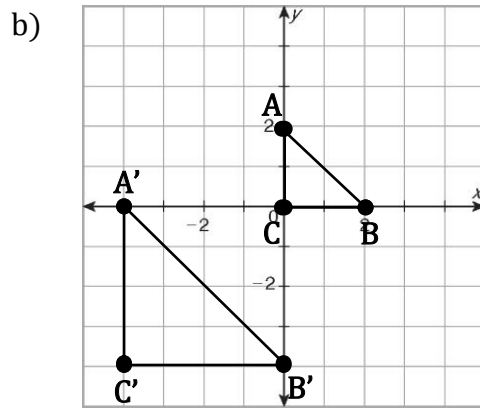
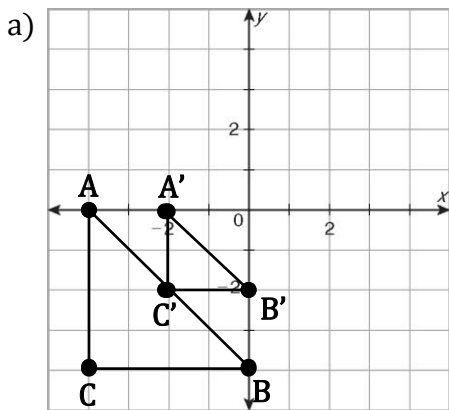
- 8) What is the measure of each exterior angle of a regular nonagon? (6.1)

CHAPTER 9 – TRANSFORMATIONS REVIEW

For 9-10, use the figure to the right to determine the final coordinates.



- 9) Given $\triangle ABC$, rotate point A 270° about the origin.
- 10) Given $\triangle ABC$, reflect point B over the y-axis and then translate by $\langle -3, 6 \rangle$.
- 11) Mrs. Klotz is trying to figure out where to put the baby crib! To make it easier to visualize, she created a blue print of the nursery using grid paper, and made each box represent one foot. After plotting where she thought she wanted the crib, she decided that it needed to be moved using the vector $\langle 3, 8 \rangle$. She then realized that she didn't leave enough room for the rocking chair, so she decided to move it using the vector $\langle -2, 4 \rangle$. If the right corner of the crib was initially at the point $(4, -2)$, where does the right corner end up?
- 12) Describe the transformation below. Then determine what point the figure was transformed from.



- 13) Mrs. Berenson decided to make a birthday card using multiple transformations. She completed the transformations in the following order: she translated the figure using vector $\langle 3, -2 \rangle$, she reflected the image over the x-axis, then rotated the figure 90° about the origin. Write the transformations she used using composition of transformations notation.

For 14-15, use the figure to the right.

- 14) Does the figure have line symmetry?
If so, how many lines of symmetry does the figure have?
- 15) Does the figure have rotational symmetry?
If so, what is the order and degree of rotation?

