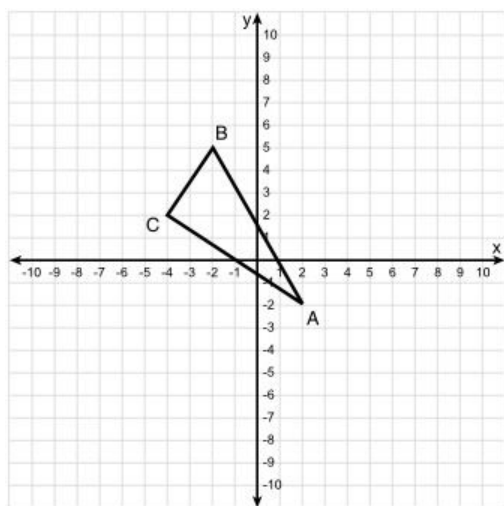


## Study Guide

Due day of midterm (Wednesday 10/2 or Thursday 10/3)

1) A triangle called ABC is rotated 90 degrees about the origin. What is the measure of angle AOA'?

2) Reflect triangle ABC across line  $x=4$ . Then reflect across  $x=-1$ . What do you notice about the original triangle and the new triangle?

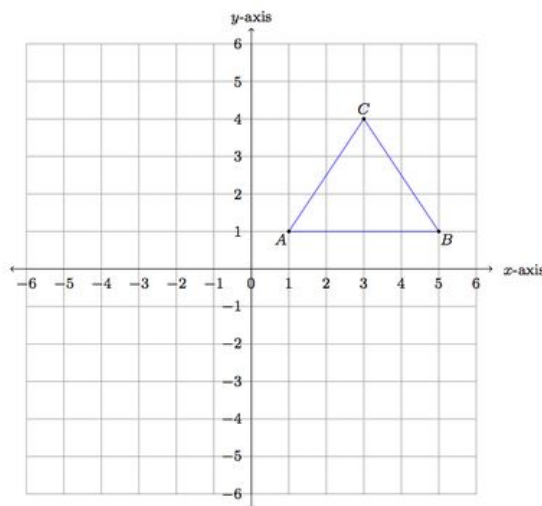


3) Reflect the point T  $(-4, 9)$  across the y-axis. Then rotate 180 degrees about the origin. Where is T'?

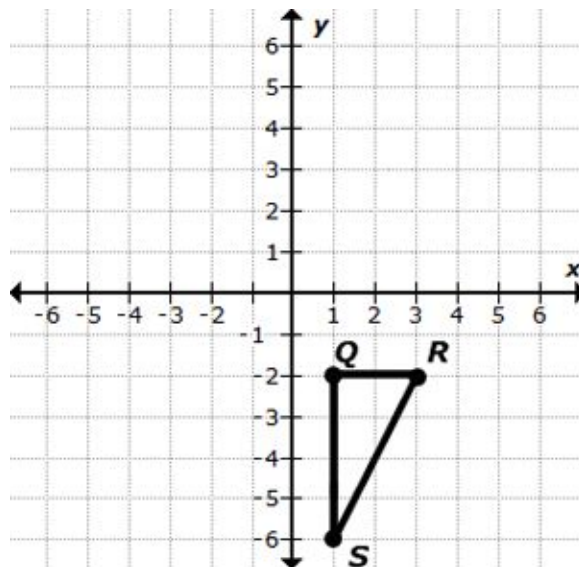
4) What is the rule for reflecting over  $y=x$ ?

5) Draw a pair of parallel lines.

6) The triangle below is transformed by the rule  $(x, y) \rightarrow (y-2, -x)$ . Draw the new triangle.



7) Reflect triangle QRS across  $y=x$



8) What transformations take a parallelogram back onto itself?

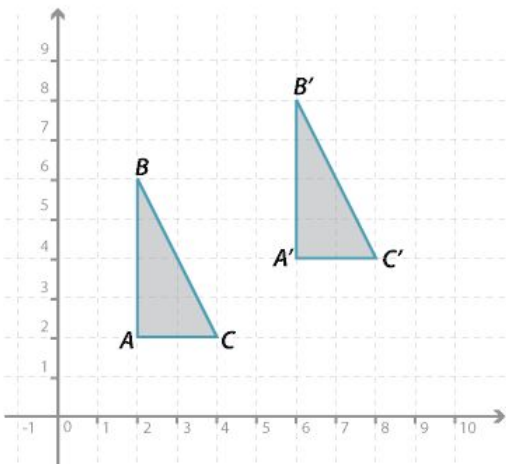
Rotations:

Reflections:

## Study Guide

Due day of midterm (Wednesday 10/2 or Thursday 10/3)

9) What kind of transformation happened below? Write the rule.



10) List all the angles about the center of each shape that will take the shape back onto itself:

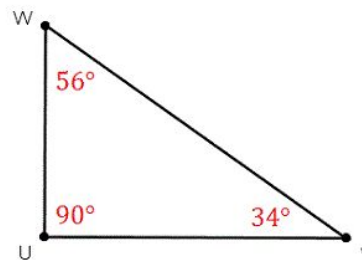
- a. Square
- b. Regular Pentagon
- c. Regular Hexagon
- d. Regular Octagon

11) Rotate the segment with endpoints A (3, -4) and B (3, -1) 90 degrees clockwise. Where are A' and B'?

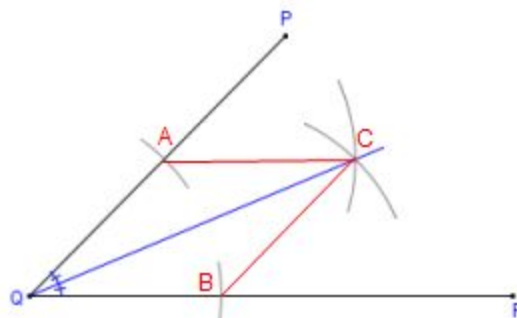
12) How many points does a line segment contain?

13) Draw two intersecting lines.

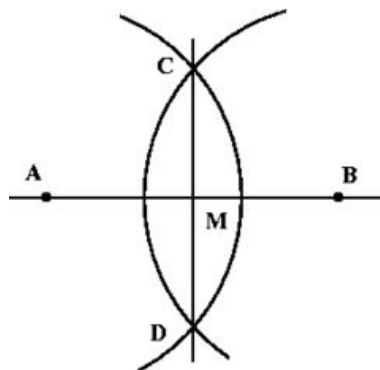
14) The following triangle is rotated 30 degrees counterclockwise about point W. What is the measure of V'?



15) Name the construction:



16) Name the construction:



17) Draw two perpendicular lines. How many right angles do they form?