

READY, SET, GO!

Name _____

Period _____

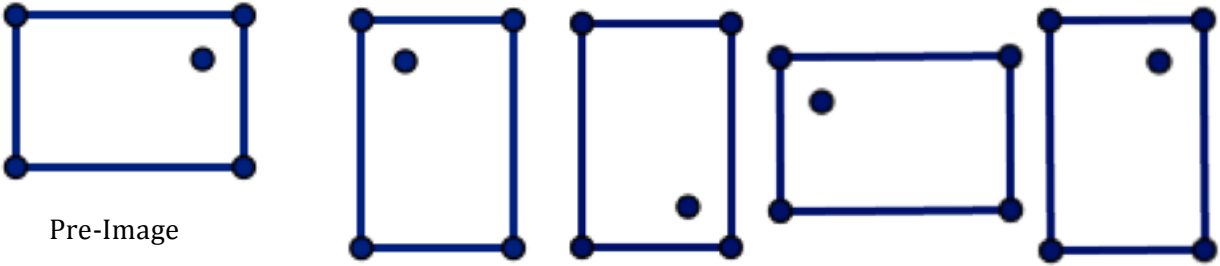
Date _____

READY

Topic: Rotations and Reflections of figures.

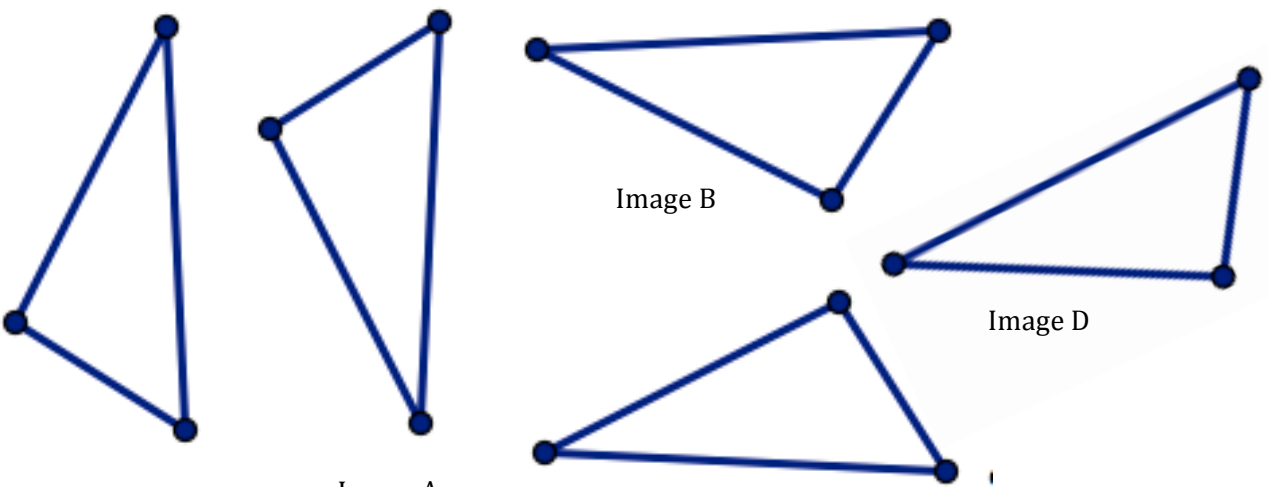
In each problem there will be a pre-image and several images based on the give pre-image. Determine which of the images are rotations of the given pre-image and which of them are reflections of the pre-image. If an image appears to be created as the result of a rotation and a reflection then state both.

1.



Pre-Image Image A Image B Image C Image D

2.



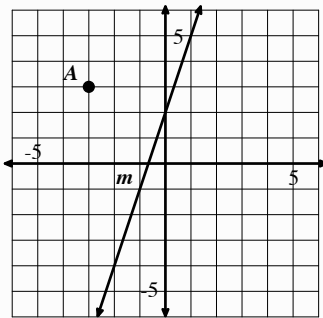
Pre-Image Image A Image B Image D Image C

SET

Topic: Reflecting and rotating points.

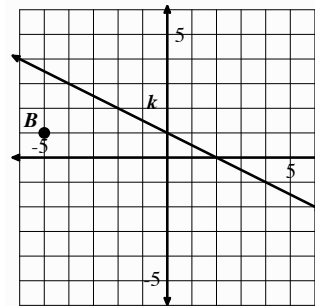
On each of the coordinate grids there is a labeled point and line. Use the line as a line of reflection to reflect the given point and create its reflected image over the line of reflection.

3.



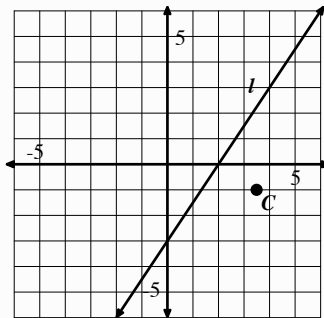
Reflect point A over line m and label the image A'

4.



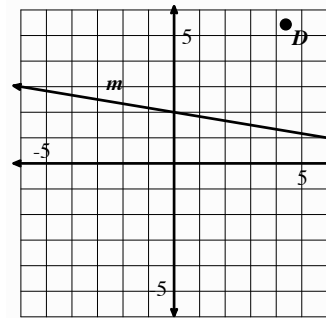
Reflect point B over line k and label the image B'

5.



Reflect point C over line l and label the image C'

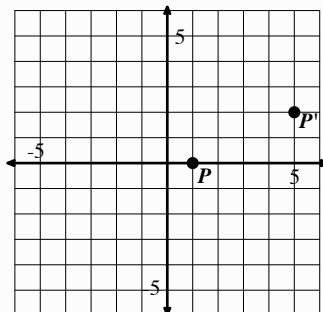
6.



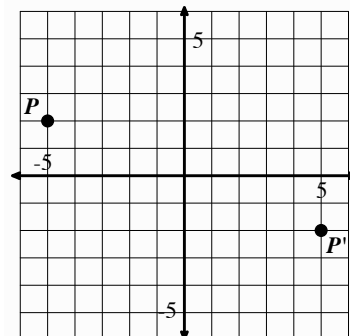
Reflect point D over line m and label the image D'

For each pair of point, P and P' draw in the line of reflection that would need to be used to reflect P onto P' . Then find the equation of the line of reflection.

7.

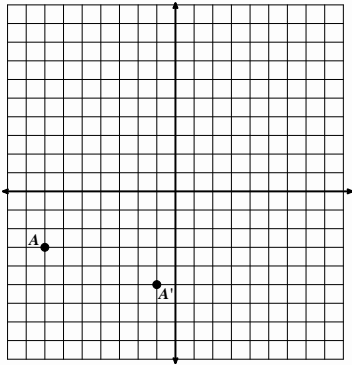


8.

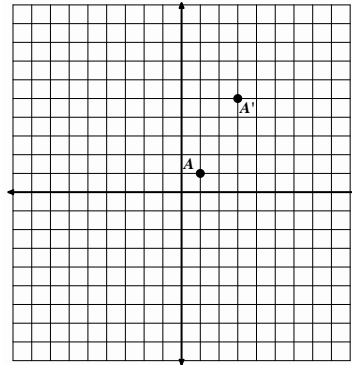


For each pair of point, A and A' draw in the line of reflection that would need to be used to reflect A onto A' . Then find the equation of the line of reflection. Also, draw a line connecting A to A' and find the equation of this line. Compare the slopes of the lines of reflection containing A and A' .

9.



10.



GO

Topic: Slopes of parallel and perpendicular lines and finding slope and distance between two points.

For each linear equation write the slope of a line parallel to the given line.

11. $y = -3x + 5$

12. $y = 7x - 3$

13. $3x - 2y = 8$

For each linear equation write the slope of a line perpendicular to the given line.

14. $y = -\frac{2}{7}x + 5$

15. $y = \frac{1}{5}x - 4$

16. $3x + 5y = -15$

Find the *slope* between each pair of points. Then, using the Pythagorean Theorem, find the *distance* between each pair of points. You may use the graph to help you as needed.

17. $(-2, -3)$ $(1, 1)$

a. Slope:

b. Distance:

18. $(-7, 5)$ $(-2, -7)$

a. Slope:

b. Distance:

