

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. (Compare all images to the pre-image.)

1.

Pre-Image Image A Image B Image C Image D

2.

Pre-Image Image A Image B Image C Image D

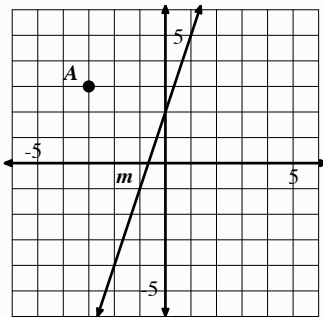
SET

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.

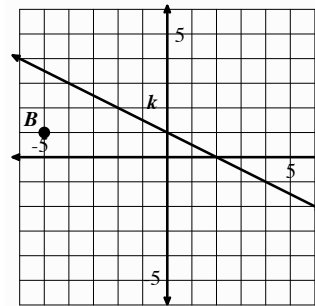
(Hint: points reflect along paths perpendicular to the line of reflection. Use perpendicular slope!)

3.



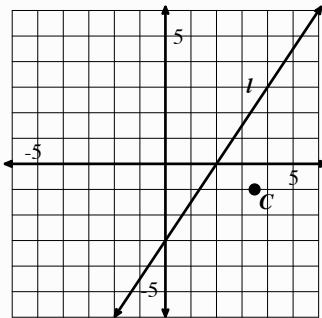
Reflect point A over line m and label the image A'

4.



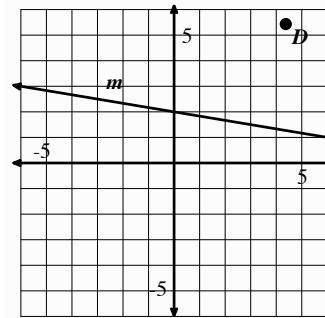
Reflect point B over line k and label the image B'

5.



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

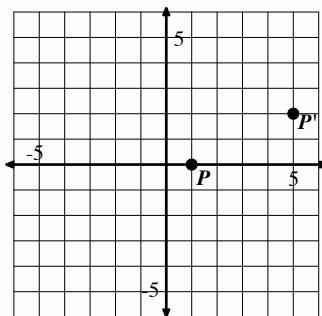
6.



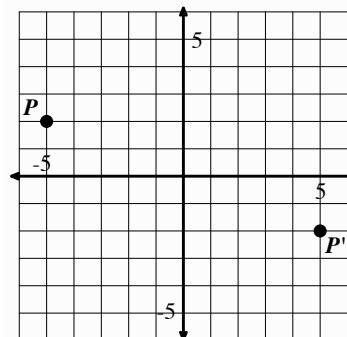
Reflect point D over line m and label the image D'

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.

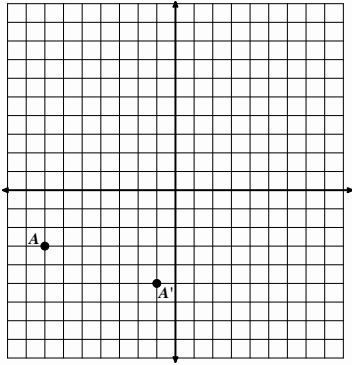


8.

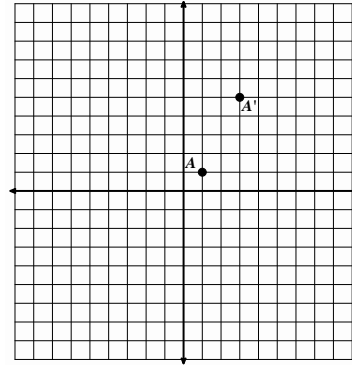


For each pair of point, A and A' draw in the line of reflection that would need to be used to reflect A onto A' . Then find the equation of the line of reflection.

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

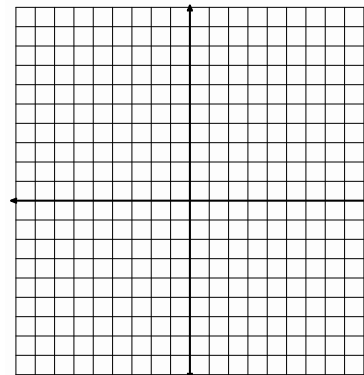
16. $3x + 5y = -15$

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: