READY, SET, GO!

Name

Period

Date

READY

Topic: Defining polygons and their attributes

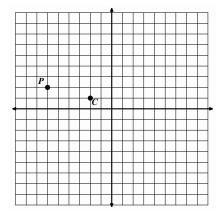
For each of the geometric words below write a definition of the object that addresses the essential elements.

- 1. Quadrilateral:
- 2. Parallelogram:
- 3. Rectangle:
- 4. Square:
- 5. Rhombus:
- 6. Trapezoid:

SET

Topic: Reflections and rotations, composing reflections to create a rotation.

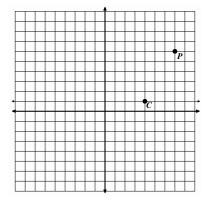
7.



Use the center of rotation point C and rotate point P clockwise around it 90°. Label the image P.

With point C as a center of rotation also rotate point P 180°. Label this image P".

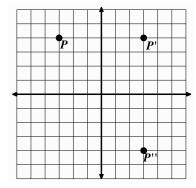
8.



Use the center of rotation point \boldsymbol{C} and rotate point \boldsymbol{P} clockwise around it 90°. Label the image \boldsymbol{P} .

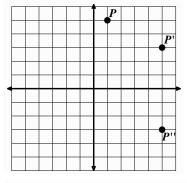
With point C as a center of rotation also rotate point P 180°. Label this image P".

9.



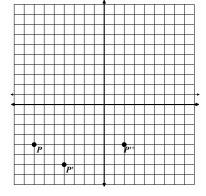
- a. What is the equation for the line for reflection that reflects point *P* onto *P*'?
- b. What is the equation for the line of reflections that reflects point P' onto P''?
- c. Could **P**" also be considered a rotation of point **P**? If so what is the center of rotation and how many degrees was point **P** rotated?

10.



- a. What is the equation for the line for reflection that reflects point *P* onto *P*'?
- b. What is the equation for the line of reflections that reflects point P' onto P''?
- c. Could **P**" also be considered a rotation of point **P**? If so what is the center of rotation and how many degrees was point **P** rotated?

11.



- a. What is the equation for the line for reflection that reflects point *P* onto *P*'?
- b. What is the equation for the line of reflections that reflects point P' onto P''?
- c. Could **P**" also be considered a rotation of point **P**? If so what is the center of rotation and how many degrees was point **P** rotated?

Mathematics Vision Project

G	U

Topic: Rotations about the origin.

Plot the given coordinate and then perform the indicated rotation in a clockwise direction around the origin, the point (0,0), and plot the image created. State the coordinates of the image.

- 12. Point A (4, 2) rotate 180° Coordinates for Point A' (___ , ___)
- 13. Point \boldsymbol{B} (-5, -3) rotate 90° clockwise Coordinates for Point \boldsymbol{B}' (___, ___)
- 14. Point C(-7,3) rotate 180° Coordinates for Point $C'(__,__)$
- 15. Point **D** (1, -6) rotate 90° clockwise Coordinates for Point **D**' (___, __)

