READY, SET, GO!

Name

Period

Date

## **READY**

Topic: Defining polygons and their attributes

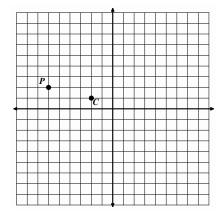
For each of the geometric words below write a definition of the object that addresses the essential elements. Also, list necessary attributes and characteristics.

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

## **SET**

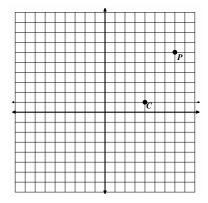
Topic: Reflections and rotations, composing reflections to create a rotation.

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''.

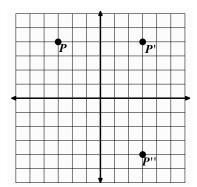
8.



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

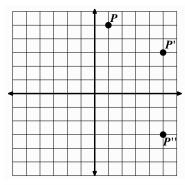
With point C as a center of rotation also rotate point P 180°. Label this image P".

9.



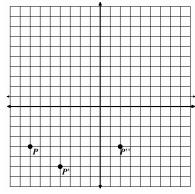
- a. What is the equation for the line for reflection that reflects point *P* onto *P*'?
- b. What is the equation for the line of reflections that reflects point **P'** onto **P'**?
- c. Could **P**" also be considered a rotation of point **P**? If so what is the center of rotation and how many degrees 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  $180^{\circ}$  Coordinates for Point A' ( \_\_\_ , \_\_\_)
- 13. Point  $\boldsymbol{B}$  (-5, -3) rotate 90° clockwise Coordinates for Point  $\boldsymbol{B}'$  ( \_\_\_, \_\_\_)
- 14. Point  $\boldsymbol{C}$  (-7, 3) rotate  $180^{\circ}$  Coordinates for Point  $\boldsymbol{C}'$  (\_\_\_,\_\_)
- 15. Point  $\boldsymbol{D}$  (1, -6) rotate 90° clockwise Coordinates for Point  $\boldsymbol{D}$ ' (\_\_\_,\_\_)

