Ready, Set, Go!

Ready

Topic: Defining geometric shapes and components

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:

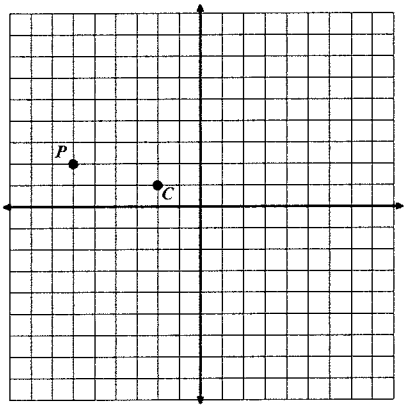
6. Trapezoid:

Set

Topic: Reflections and Rotations, composing reflections to create a rotation

Perform the indicated rotations.

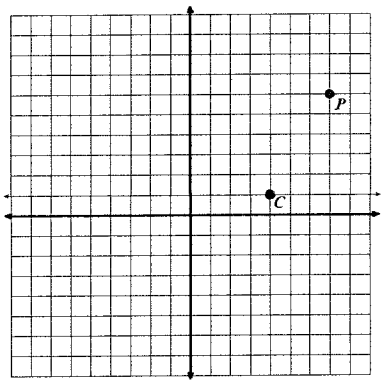
7.



Use the center of rotation point ***C*** and rotate point ***P*** clockwise around it 90^0. Label the image ***P'***.

With point ***C*** as a center of rotation also rotate point ***P*** 180^0. Label this image ***P''***.

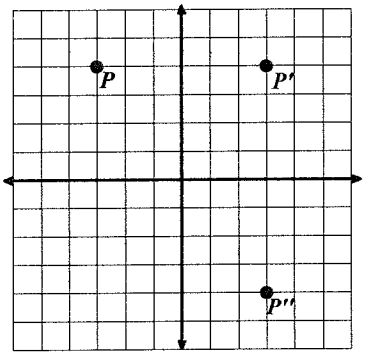
8.



Use the center of rotation point ***C*** and rotate point ***P*** clockwise around it 90⁰. Label the image ***P'***.

With point ***C*** as a center of rotation also rotate point ***P*** 180⁰. Label this image ***P''***.

9.

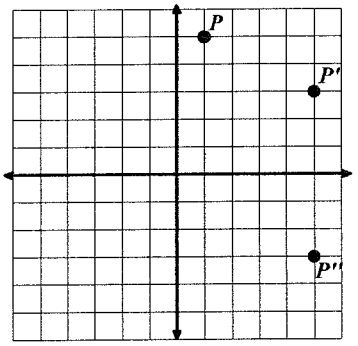


a. What is the equation for the line for reflection that reflects point ***P*** onto ***P'***?

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.



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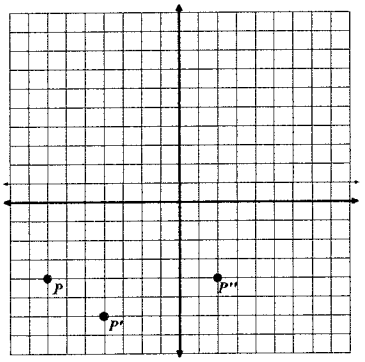

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Go

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 B (-5, -3) rotate 90° clockwise
    Coordinates for Point B' (___ , ___)

14. Point C (-7, 3) rotate 180°
    Coordinates for Point C' (___ , ___)

15. Point D (1, -6) rotate 90° clockwise
    Coordinates for Point D' (___ , ___)