Warm-Up   May 8, 2018

Name: _____   Section 7.5/7.6 Check
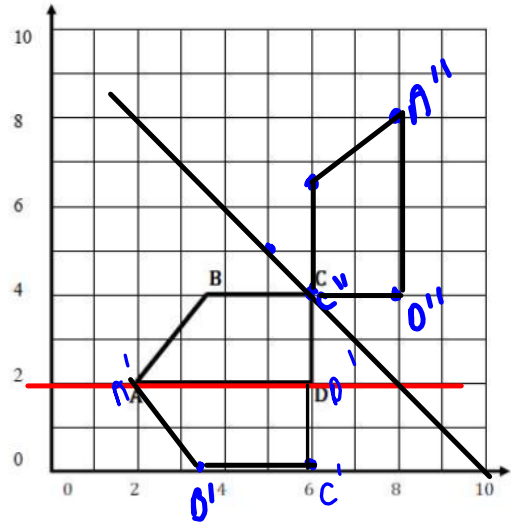
1. Write the coordinates of the new shape after a reflection in the horizontal line through 2 on the y-axis.

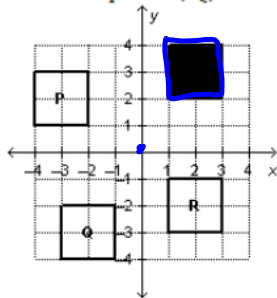| Point	Image
A (2 , 2)	A' (2 , 2)
B (3.5 , 4)	B' (3.5 , 0)
C (6 , 4)	C' (6 , 0)
D (6 , 2)	D' (2 , 2)

2. Reflect ABCD through the line with the coordinates (6,4) and (5,5). List the coordinate for B"
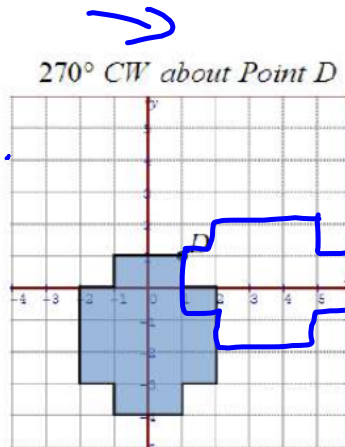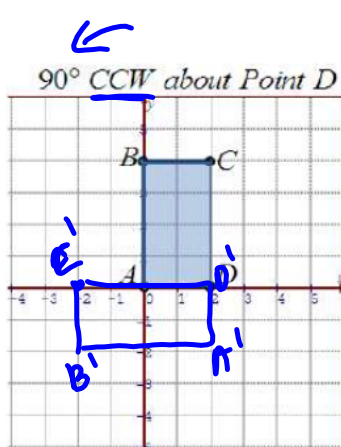
(6, 6.5)

3. i. Which of squares P, Q, and R are related to the shaded square by rotational symmetry about the origin?

    a.   Squares P and R   c.   Squares Q and R
    b.   Squares P, Q, and R   d.   Squares P and Q

4.

90° CCW about Point D   270° CW about Point D

There are three types of transformations:

[symmetry]

1. reflections   [Line of reflection]

    • Reflect through x-axis [vertical]

    . Reflect through y-axis [horizontal]

    *oblique two coordinates

2. rotations

    • order of rotation # of times the object overlaps in 360

    • angle of rotation $\dfrac{360°}{\text{order of rotation}}$

3. translations [slide]

    Left 3 up 2 [L3U2]

    right 4 down 2 [R4 D2]

On grid paper plot the following points:
A (1, 3) B (3,1) and C (5,5)

Do the following Transformation

1. A translation [slide] 2 units right and 2 units down of ABC.

2. A rotation of ABC 180 about vertex C

3. A line of reflection through 6 on y axis