

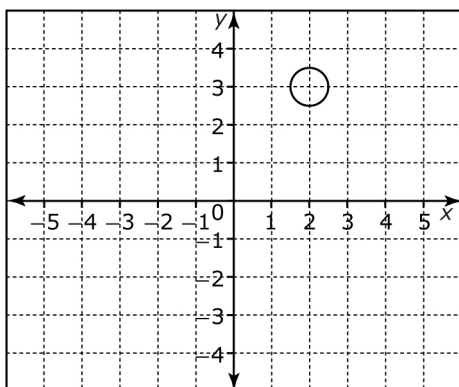
Chapter 6 Test

For #1 to #5, select the best answer.

1. Point P(3,3) is reflected over the y-axis and translated 3 units down. What are the coordinates of the new point?

A (0, -3) **B** (3, 0)
C (-3, 0) **D** (-3, 3)

2. Reflect the circle over the x-axis. Then, reflect it over the y-axis. Where is the centre of the final image?

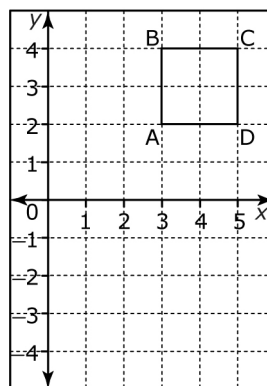


A (2, -3) **B** (-2, 3)
C (2, -2) **D** (-2, -3)

3. A line begins at (0, 0) and ends at (5, 0). When the line is rotated 180° , where is its endpoint?

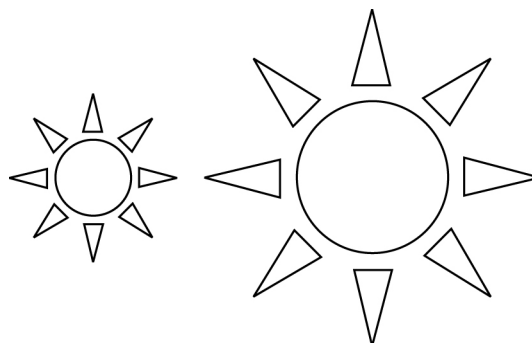
A (-5, 0) **B** (0, -5)
C (5, 0) **D** (0, 5)

4. Rotate the square 90° clockwise about the origin. What are the coordinates of the corners of the image?



A $A'(-2, 3)$, $B'(-4, 3)$,
 $C'(-4, 5)$, $D'(-2, 5)$
B $A'(2, -3)$, $B'(4, -3)$,
 $C'(4, -5)$, $D'(2, -5)$
C $A'(-3, -2)$, $B'(-3, -4)$,
 $C'(-5, -4)$, $D'(-5, -2)$
D $A'(2, -3)$, $B'(4, 3)$,
 $C'(4, -5)$, $D'(2, 5)$

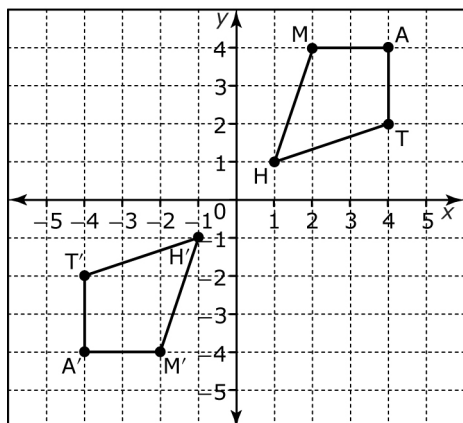
5. The image has undergone a transformation. Which is the best description of the transformation?



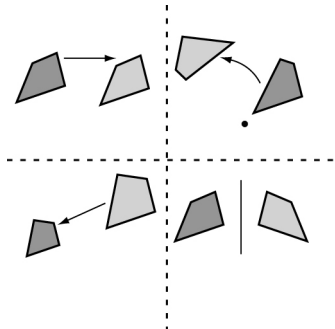
A rotation **B** dilation
C reflection **D** translation



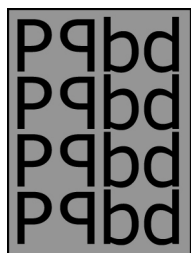
6. Describe the transformation(s) used to transform the original in Quadrant I to the image in Quadrant III.



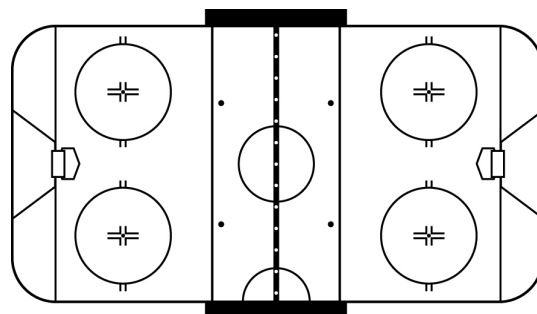
7. Label each of the transformations with one of the following terms: translation, rotation, dilation, reflection.



8. Which two transformations were used to create the pattern?



9. An NHL hockey rink has a trapezoid shape behind each goal. Describe two ways of transforming one trapezoid image to the other.



10. Perform the following transformations, in order, using the diagram.
- translate the shape 2 right and 3 up
 - rotate 180° about the origin
 - reflect over line r

