

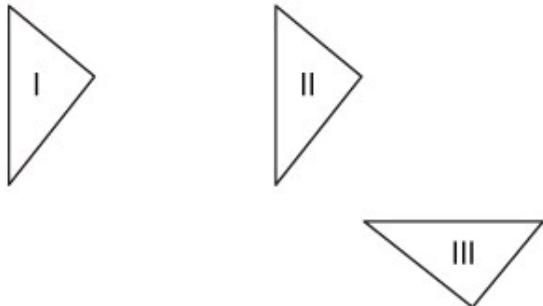
TEST NAME: **Rotations HW**
TEST ID: **555100**
GRADE: **08**
SUBJECT: **Mathematics**
TEST CATEGORY: **School Assessment**

Student: _____

Class: _____

Date: _____

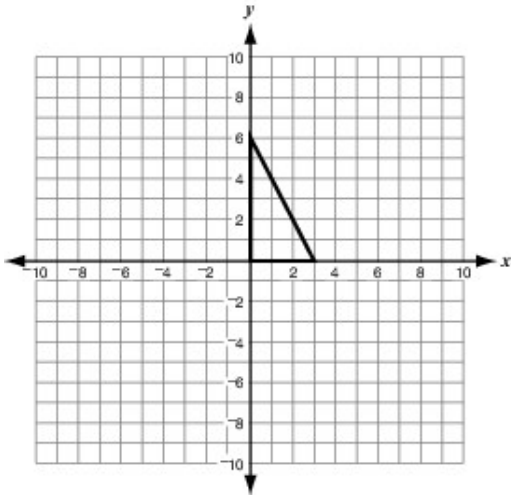
1. The drawing shows a series of transformations.



Which sequence moves Triangle I to Triangle II to Triangle III?

- A. reflection followed by rotation
 - B. translation followed by rotation
 - C. translation followed by reflection
 - D. reflection followed by translation
2. Triangle ABC is rotated 95° and then translated 3 units to the left to form triangle DEF . Which statement about the triangles **must** be true?
- A. Triangle DEF will be larger than triangle ABC .
 - B. Triangle DEF will be congruent to triangle ABC .
 - C. Triangle DEF will have an angle that is equal to 95° .
 - D. Triangle DEF will be similar, but not congruent, to triangle ABC .

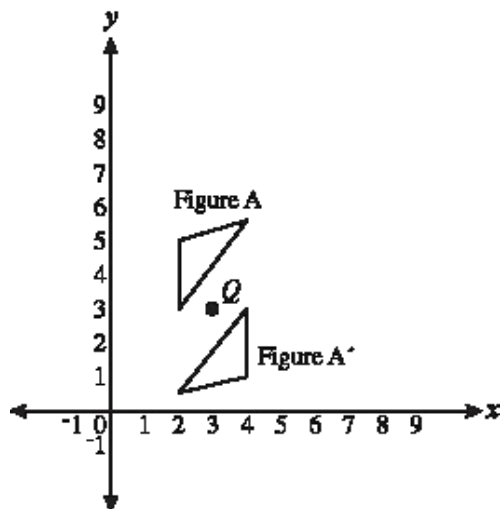
3. Katie drew a triangle on the coordinate grid below.



If the triangle is rotated 90° counterclockwise about the origin, what will be the new coordinates of the triangle's vertices?

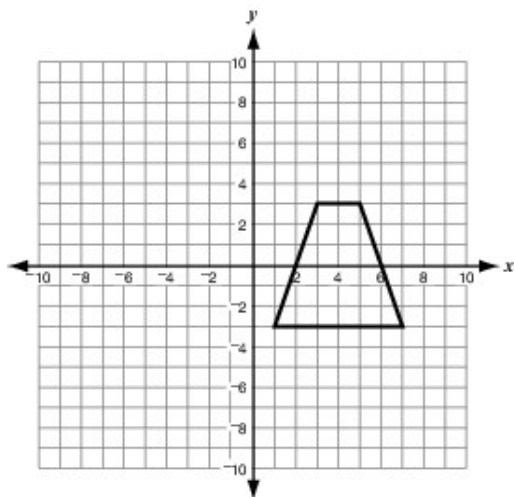
- A. $(0, 6), (-3, 0), (0, 0)$
- B. $(-6, 0), (0, 3), (0, 0)$
- C. $(6, 0), (0, -3), (0, 0)$
- D. $(0, -6), (3, 0), (0, 0)$

4. Which single transformation performed on Figure A results in Figure A'?



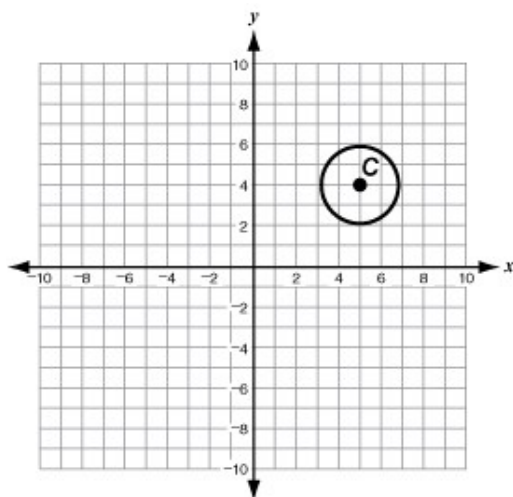
- A. Rotation about point Q
- B. Reflection across point Q
- C. Translation with a midpoint at point Q
- D. Dilation with a positive scale, with center of dilation at point Q

5. If the trapezoid below is translated 4 units up and 6 units to the left, what will be the new coordinates of the vertices?



- A. $(-5, 0), (-3, 7), (-1, 7), (1, 0)$
- B. $(7, 1), (9, 7), (11, 7), (13, 1)$
- C. $(-1, -5), (1, 1), (3, 1), (5, -5)$
- D. $(-5, 1), (-3, 7), (-1, 7), (1, 1)$

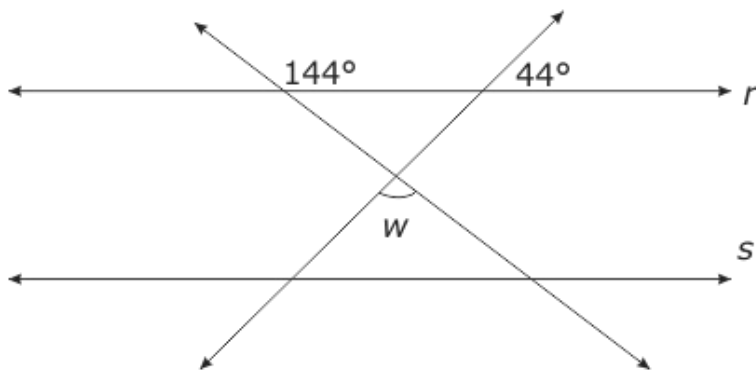
6. A circle with center C , shown below, is reflected across the y -axis and then reflected across the x -axis.



What are the new coordinates of the center C ?

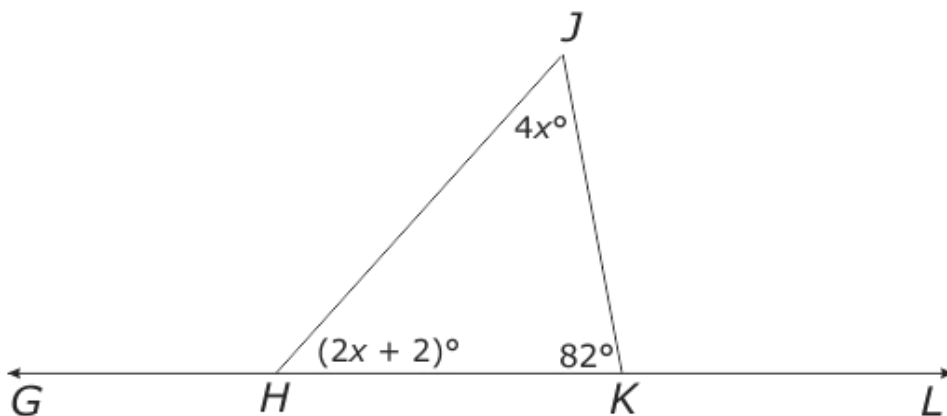
- A. $(5, -4)$
- B. $(4, -5)$
- C. $(-4, -5)$
- D. $(-5, -4)$

7. In the figure below, lines r and s are parallel.



What is the measure of $\angle w$?

- A. 90°
 - B. 100°
 - C. 136°
 - D. 144°
8. Triangle HJK is shown in the figure below.



What is the measure of $\angle GHJ$?

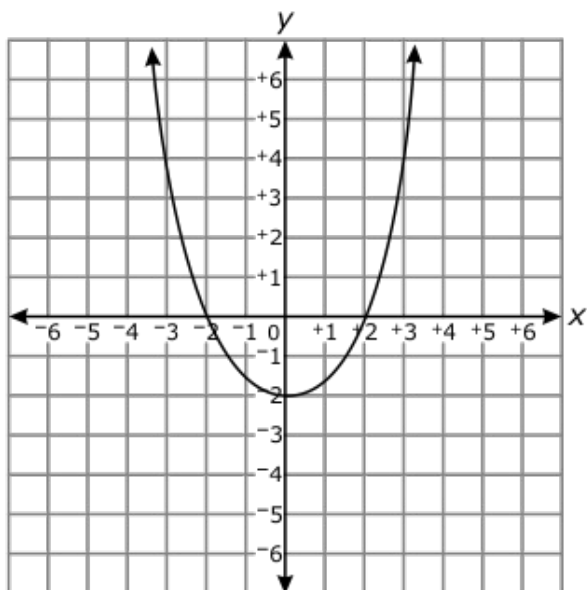
- A. 116°
- B. 131°
- C. 140°
- D. 146°

9. Triangle JKL has vertices at $J(-4, 3)$, $K(2, -5)$, and $L(-4, -5)$. What is the perimeter of triangle JKL ?

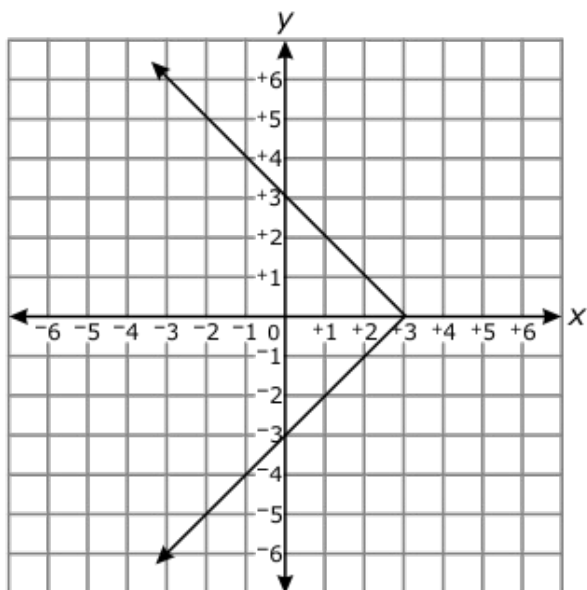
- A. 2 units
- B. 10 units
- C. 14 units
- D. 24 units

10. Which graph is a function?

A.



B.



C.

