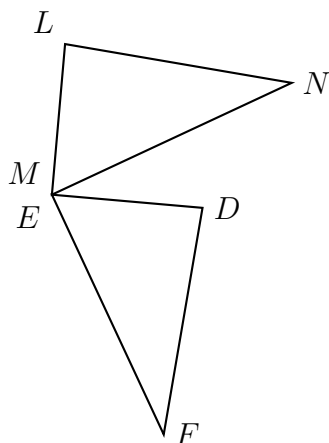


Name:

8.4 Classwork: Rotation

1. A rotation maps triangle DEF onto triangle LMN .

Write the letter or letters for each corresponding object.



(a) $E \rightarrow$

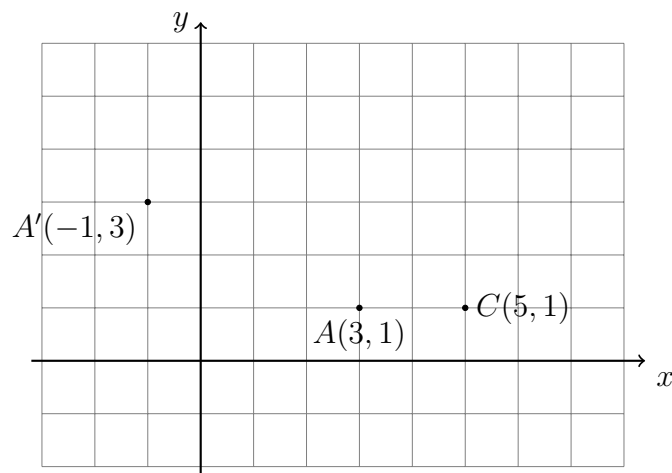
(b) $F \rightarrow$

(c) $DF \rightarrow$

2. A rotation centered at the origin maps A to A' , as shown, $A(3, 1) \rightarrow A'(-1, 3)$.

(a) Which correctly identifies the rotation? point C' as an ordered pair.

- (A) Clockwise 180°
- (B) Counter clockwise 180°
- (C) Clockwise 90°
- (D) Counter clockwise 90°
- (E) None of the above



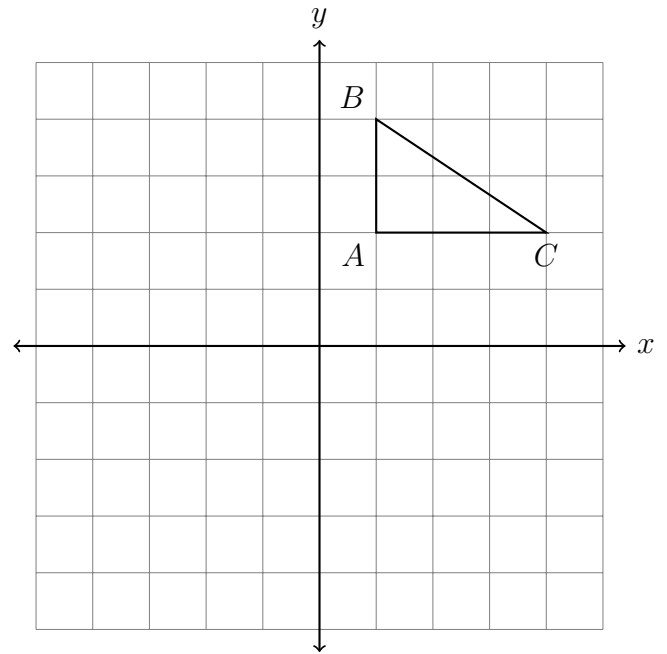
- (b) If the same translation is applied to $C(5, 1) \rightarrow C'(x, y)$, plot and label the

3. Rotate the triangle 90° clockwise around the origin, $\triangle ABC \rightarrow \triangle A'B'C'$. Complete the table of the coordinates and plot and label the image on the grid.

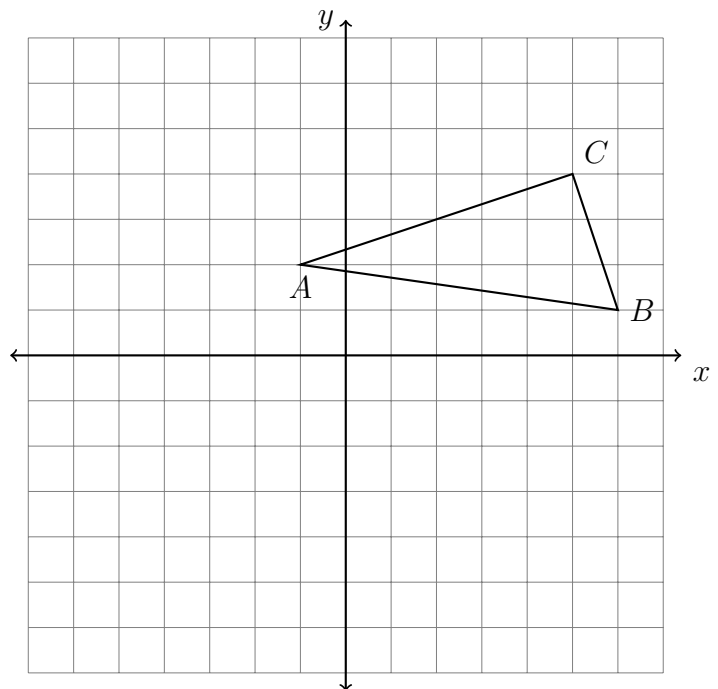
$$A(1, 2) \rightarrow$$

$$B(1, 4) \rightarrow$$

$$C(4, 2) \rightarrow$$



4. $\triangle ABC$ is shown with vertices $A(-1, 2)$, $B(6, 1)$, and $C(5, 4)$. Rotate the triangle 90° counter clockwise around the origin. Write down its coordinates in a table and plot and label it on the graph.



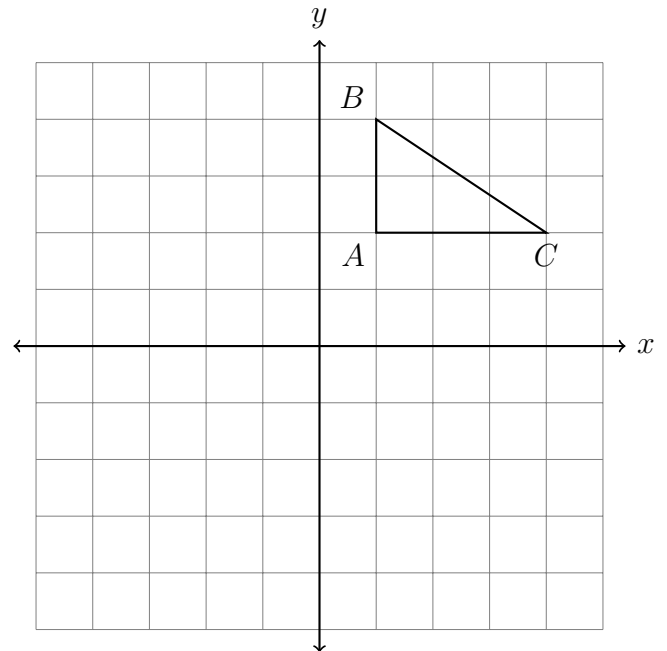
Name:

5. Rotate the triangle 90° clockwise around the origin, $\triangle ABC \rightarrow \triangle A'B'C'$. Complete the table of the coordinates and plot and label the image on the grid.

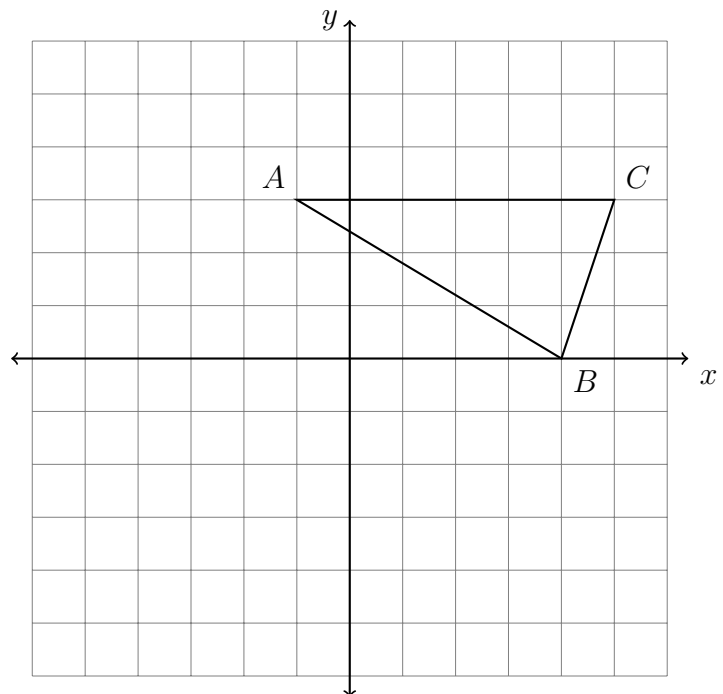
$A(1, 2) \rightarrow$

$B(1, 4) \rightarrow$

$C(4, 2) \rightarrow$



6. $\triangle ABC$ is shown with vertices $A(-1, 3)$, $B(4, 0)$, and $C(5, 3)$. Rotate the triangle 90° counterclockwise around the origin. Write down its coordinates in a table and plot and label it on the graph.



4

7. A dilation centered at A maps $\triangle ABC \rightarrow \triangle ADE$. Given that $BC = 8$, $DE = 14$.

Write the value of the scale factor k .

