Graph the image of $\mathrm{J}(-5,-1)$ after a rotation of $180^{\circ}$ clockwise around the origin. What are the coordinates of the resulting point, J'?

$\bigcirc J^{\prime}(5,1) \bigcirc J^{\prime}(-5,-1) \quad \bigcirc J^{\prime}(-1,5)$

## Show your work

\#2
Graph the image of $Z(-3,-9)$ after a rotation of $180^{\circ}$ clockwise around the origin. What are the coordinates of the resulting point, $Z^{\prime}$ ?
$Z^{\prime}(-9,3)$
○ $Z^{\prime}(-3,-9)$
O $Z^{\prime}(3,9)$

Show your work
\#3
Graph the image of $C(-6,-2)$ after a rotation of $180^{\circ}$ counterclockwise around the origin. What are the coordinates of the resulting point, $\mathrm{C}^{\prime}$ ?


Graph the image of $B(-8,-9)$ after a rotation of $180^{\circ}$ counterclockwise around the origin. What are the coordinates of the resulting point, $\mathrm{B}^{\prime}$ ?


## Show your work

\#5
Graph the image of $S(7,-7)$ after a rotation of $180^{\circ}$ counterclockwise around the origin. What are the coordinates of the resulting point, $\mathrm{S}^{\prime}$ ?


## Show your work

\#6
Graph the image of T(-9,-4) after a rotation of $180^{\circ}$ counterclockwise around the origin. What are the coordinates of the resulting point, $\mathrm{T}^{\prime}$ ?


- $\mathrm{T}^{\prime}(-4,9)$
- $\mathrm{T}^{\prime}(9,4)$
( $\mathrm{T}^{\prime}(-9,-4)$

Show your work

Graph the image of $U(-1,10)$ after a rotation of $180^{\circ}$ clockwise around the origin. What are the coordinates of the resulting point, $\mathrm{U}^{\prime}$ ?

$\mathrm{U}^{\prime}(1,-10)$
○ $U^{\prime}(-1,10)$
$\bigcirc \mathrm{U}^{\prime}(10,1)$
\#8
Graph the image of $\mathrm{I}(5,3)$ after a rotation of $180^{\circ}$ counterclockwise around the origin. What are the coordinates of the resulting point, I'?

○ $I^{\prime}(-5,-3)$
○ $I^{\prime}(5,3)$
○ $I^{\prime}(3,-5)$

Graph the image of $\mathrm{V}(2,-1)$ after a rotation of $180^{\circ}$ clockwise around the origin. What are the coordinates of the resulting point, $\mathrm{V}^{\prime}$ ?

$\bigcirc \mathrm{V}^{\prime}(-2,1) \quad \mathrm{V}^{\prime}(2,-1) \quad \bigcirc \mathrm{V}^{\prime}(-1,-2)$

Graph the image of $\mathrm{O}(6,4)$ after a rotation of $180^{\circ}$ counterclockwise around the origin. What are the coordinates of the resulting point, $\mathrm{O}^{\prime}$ ?


$$
\mathrm{O}^{\prime}=(\square, \square)
$$

## Show your work

\#11
Graph the image of $\mathrm{W}(7,7)$ after a rotation of $180^{\circ}$ clockwise around the origin. What are the coordinates of the resulting point, $\mathrm{W}^{\prime}$ ?


## Show your work

\#12
Graph the image of $W(-3,5)$ after a rotation of $180^{\circ}$ counterclockwise around the origin. What are the coordinates of the resulting point, $\mathrm{W}^{\prime}$ ?


| Question | Answer |
| :---: | :--- |
| $\# 1$ | choice 1 |
| $\# 2$ | choice 3 |
| $\# 3$ | 6,2 |
| $\# 4$ | 8,9 |
| $\# 5$ | $-7,7$ |
| $\# 6$ | choice 2 |
| $\# 7$ | choice 1 |
| $\# 8$ | choice 1 |
| $\# 9$ | choice 1 |
| $\# 10$ | $-6,-4$ |
| \#12 | $-7,-7$ |

