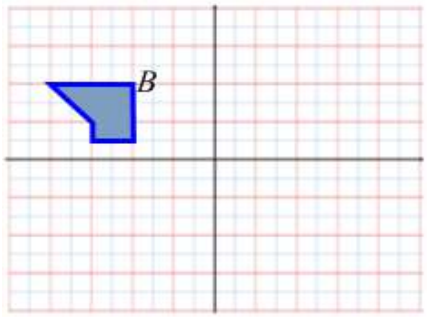
Geometry 2 - 3 Week Study Guide #1

Transformations (2 points each)

1) What is the coordinate of the image of Point *B* after a translation of $(x, y) \rightarrow (x+10, y-6)$?

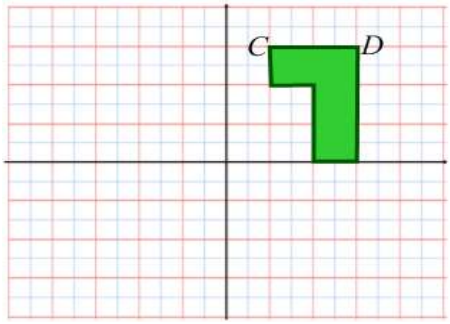
Graph the translation.



B' = (,)

2) What are the endpoints of $\overline{CD}$ after a rotation of 180° around the origin?

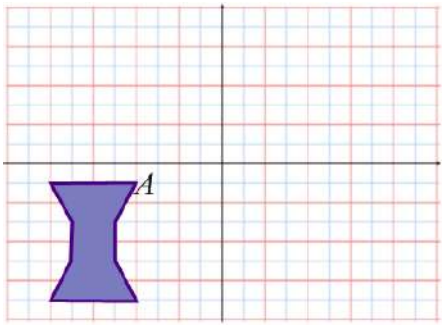
Graph the rotation.



C' = (,) D' = (,)

3) What is the coordinate of the image of Point *A* after a reflection across the *x*-axis?

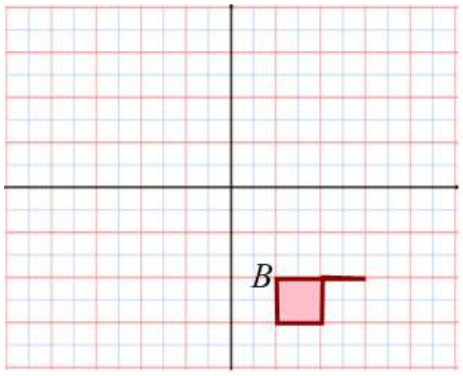
Graph the reflection.



A' = (,)

4) What is the coordinate of the image of Point *B* after a translation of $(x, y) \rightarrow (-3x, -y)$?

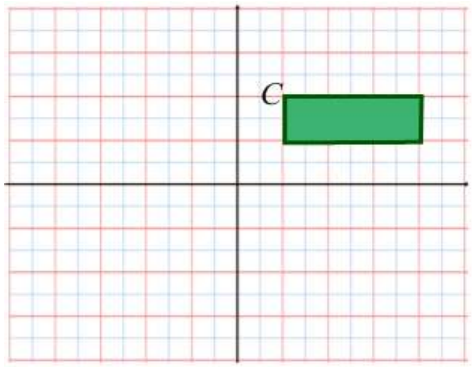
Graph the translation.



B' = (,)

5) What is the coordinate of the Point *C* after a rotation of 90° counter-clock wise around the origin?

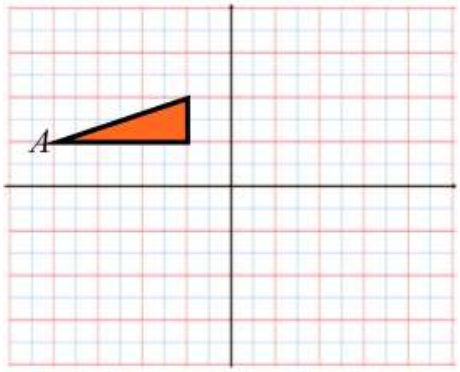
Graph the rotation.



C' = (,)

6) What is the coordinate of the image of Point *A* after a reflection across the line y = *x* ?

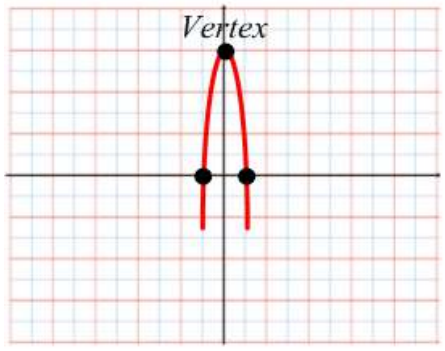
Graph the reflection.



A' = (,)

7) What is the coordinate of the vertex after a translation of $(x, y) \rightarrow (x+4, y-2)$?

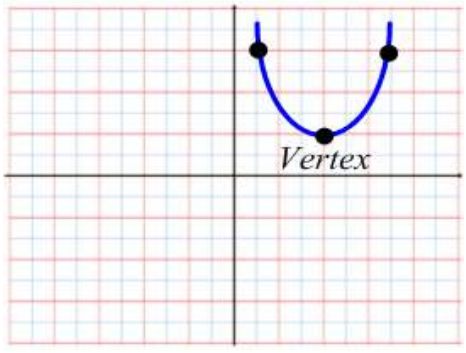
Graph the translation.



Vertex' = (,)

8) What is the vertex of the parabola after a 180° rotation around the origin?

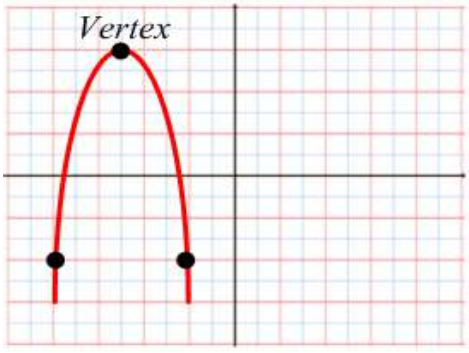
Graph the rotation.



Vertex' = (,)

9) What is the coordinate of the the vertex after a reflection across the line y = *x* ?

Graph the reflection.

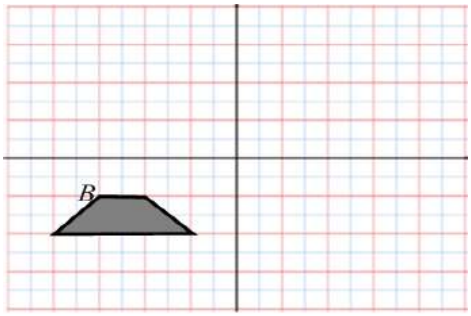


Vertex' = (,)

Transformations (2 points each)

10) What is the coordinate of the image of Point B after a translation of $(x, y) \rightarrow (x+6, y+4)$?

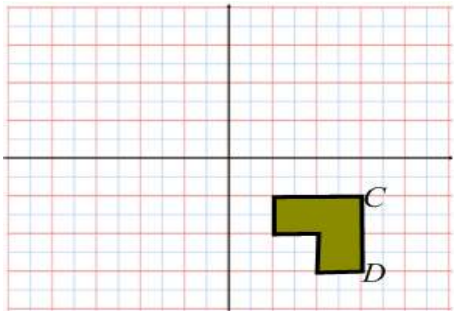
Graph the translation.



B' = (,)

11) What are the endpoints of $\overline{CD}$ after a rotation of 180° around the origin?

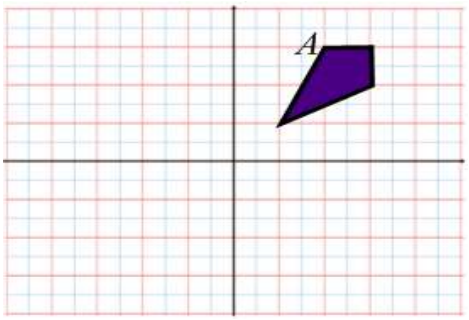
Graph the rotation.



C' = (,) D' = (,)

12) What is the coordinate of the image of Point A after a reflection across the y-axis?

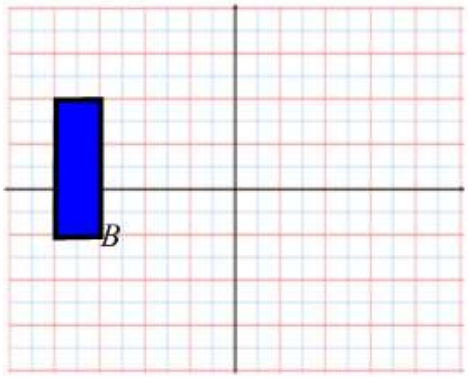
Graph the reflection.



A' = (,)

13) What is the coordinate of the image of Point B after a translation of $(x, y) \rightarrow (x+9, y+4)$?

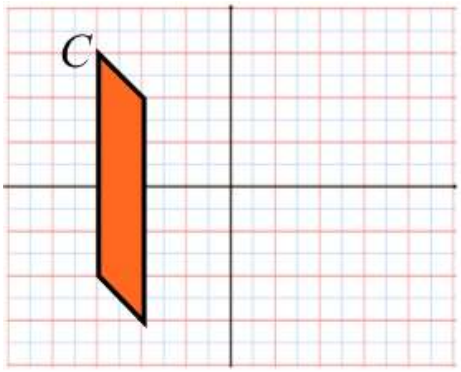
Graph the translation.



B' = (,)

14) What is the coordinate of the Point C after a rotation of 90° clock wise around the origin?

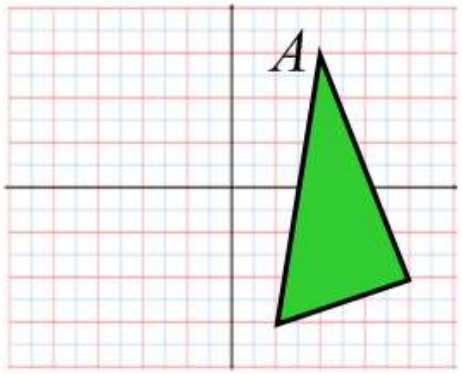
Graph the rotation.



C' = (,)

15) What is the coordinate of the image of Point A after a reflection across the line y-axis?

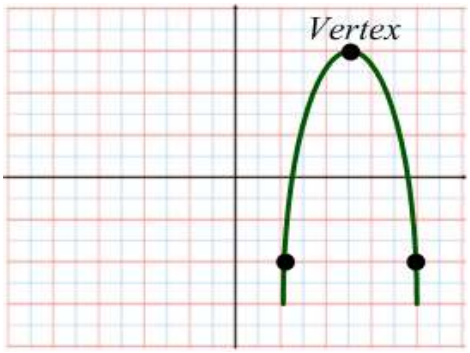
Graph the reflection.



A' = (,)

16) What is the coordinate of the vertex after a translation of $(x, y) \rightarrow (x-10, y-4)$?

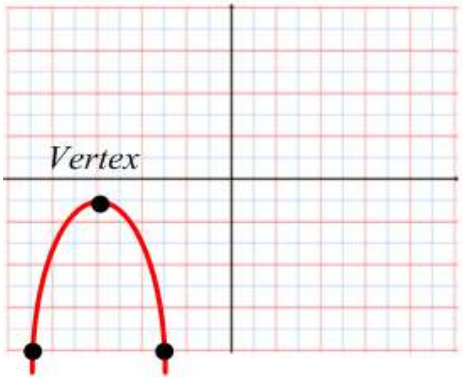
Graph the translation.



Vertex´ = (,)

17) What is the vertex of the parabola after a 180° rotation around the origin?

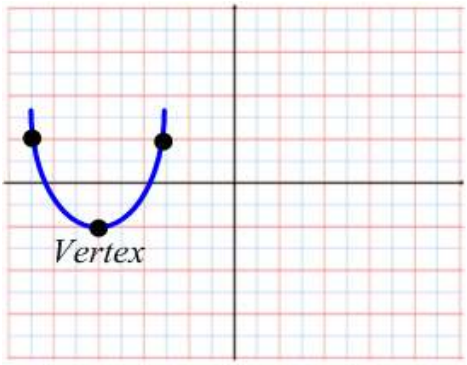
Graph the rotation.



Vertex´ = (,)

18) What is the coordinate of the the vertex after a reflection across the line y = x ?

Graph the reflection.



Vertex´ = (,)

Geometry 1 Review (1 point each)

19) Order the statements.

A: If B, then R.
B: If Q, then T.
C: If T, then W.
D: If R, then C
E: If C, then Q.

20) B is the midpoint of $\overline{AC}$. C is the midpoint of $\overline{AD}$. If $\overline{BC}$ = 20, find the missing lengths.

$\overline{AB}$ =_____

$\overline{AC}$ = _____

$\overline{AD}$ = _____

$\overline{BD}$ = _____

$\overline{CD}$ = _____

21) Segment AB is bisected at M.

Find $\overline{AB}$ if $\overline{AM} = 6x - 8$ and $\overline{MB} = 2x + 12$.

$\overline{AB}$ = _____

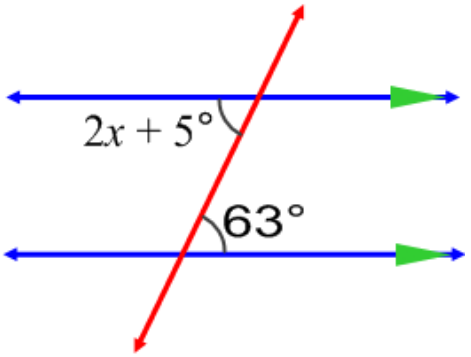
22) Find the coordinates of the midpoint $\overline{AB}$ if A(2, 1) and B(-3, 5).

M = _____

23) What is the distance between the given points E(4, -4) and G(-2, -2)?

d = _____

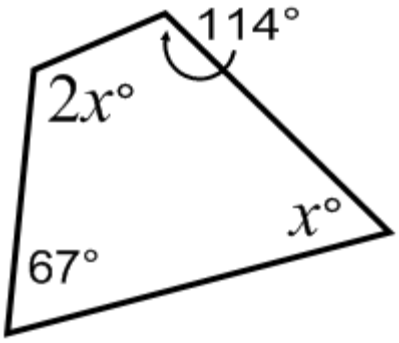
24) Find the value of x if line l is parallel to line m.



x = _____

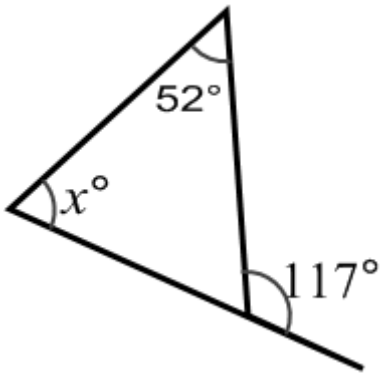
Vocab _____

25) In the diagram below, what is the value of x?



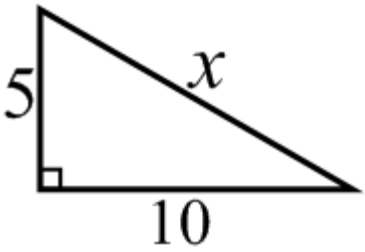
x = _____

26) What is the value of x?



x = _____

27) What is the value of x?



x = _____