Reflections across the x-axis
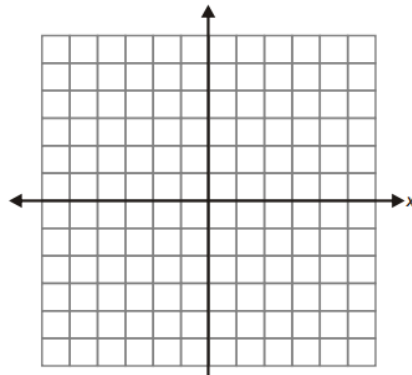
Example: Reflect figure ABC across
the x-axis
A(-4, 2)→_____
B(-4, 5)→_____
C(-1, 2)→_____

Reflections across the y-axis

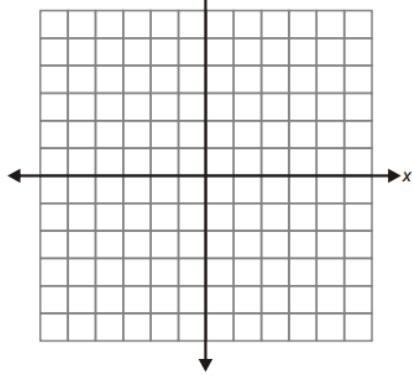Example: Reflect figure ABC across
the y-axis
A(-4, 2)→_____
B(-4, 5)→_____
C(-1, 2)→_____

Reflections across the line y=x

Example: Reflect figure ABC across
the x-axis
A(-4, 2)→_____
B(-4, 5)→_____
C(-1, 2)→_____

Reflections across the line y=-x

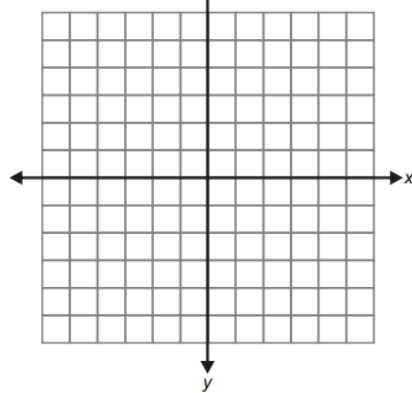Example: Reflect figure ABC across
the y-axis
A(-4, 2)→_____
B(-4, 5)→_____
C(-1, 2)→_____

Reflections across the line y=___

Example: Reflect figure ABC across
the line y=-1
A(-4, 2)→_____
B(-4, 5)→_____
C(-1, 2)→_____

Reflections across the line x=___

Example: Reflect figure ABC across
the line x=1
A(-4, 2)→_____
B(-4, 5)→_____
C(-1, 2)→_____

Practice 1:

Directions: Write what the coordinates will be by reflecting each of the given points across the x-axis. Use the reflection rules above to help you answer the questions. When reflecting across the x-axis, the x-value remains the same and change the sign of the y-value.

1) A (4,5)   A' (   )

2) D (-3,-5) D' (   )

3) G (-6,-8)   G' (   )

4) M (-2,8)   M' (   )

5) N (7,0)   N' (   )

6) E (-5,4)   E' (   )

Directions: Write what the coordinates will be by reflecting each of the given points across the y-axis. Use the reflection rules above to help you answer the questions. When reflecting across the y-axis, the y-value remains the same and change the sign of the x-value.

7) J (-2,-4)   J' (   )   8) Y (-5,7)   Y' (   )   9) S (4,6)   S' (   )

10) Q (4,7)   Q' (   )   11) R (-12,3)   R' (   )   12) W (3,8)   W' (   )

Directions: Write what the coordinates will be by reflecting each of the given points across the line y=x. Use the reflection rules above to help you answer the questions. When reflecting across the line y=x, the x-value and y-value switch spots.

13) H (4,5)   H' (   )   14) X (-3,-4)   X' (   )   15) B (-6,-6)   B' (   )

16) A (2,4)   A' (   )   17) J (11,5)   J' (   )   18) P (-2,-4)   P' (   )

Directions: Write what the coordinates will be by reflecting each of the given points across the line y=-x. Use the reflection rules above to help you answer the questions. When reflecting across the line y=-x, the x-value and y-value switch spots and change signs.
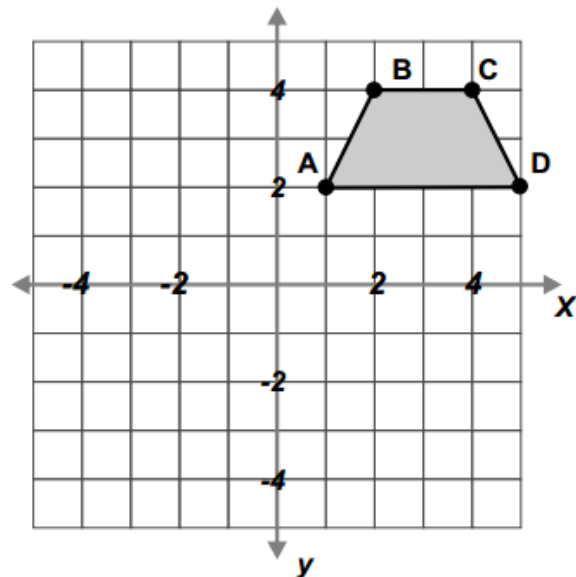
19) V (-8,-5)   V' (   )   20) C (-6,-2)   C' (   )   21) D (3,-1)   D' (   )

22) O (2,2)   O' (   )   23) U (-4,5)   U' (   )   24) K (9,-6)   K' (   )

Practice 2:

1) Reflect figure ABCD across the x-axis. Draw the reflected figure on the coordinate plane.

What are the new coordinates?

A'   B'   C'   D'

2) Reflect figure ABCD across the y-axis. Draw the reflected figure on the coordinate plane.

What are the new coordinates?

A'   B'   C'   D'
'

3) After reflecting figure ABCD across the x-axis, what quadrant did the figure end up in?

4) After reflecting figure ABCD across the y-axis, what quadrant did the figure end up in?

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