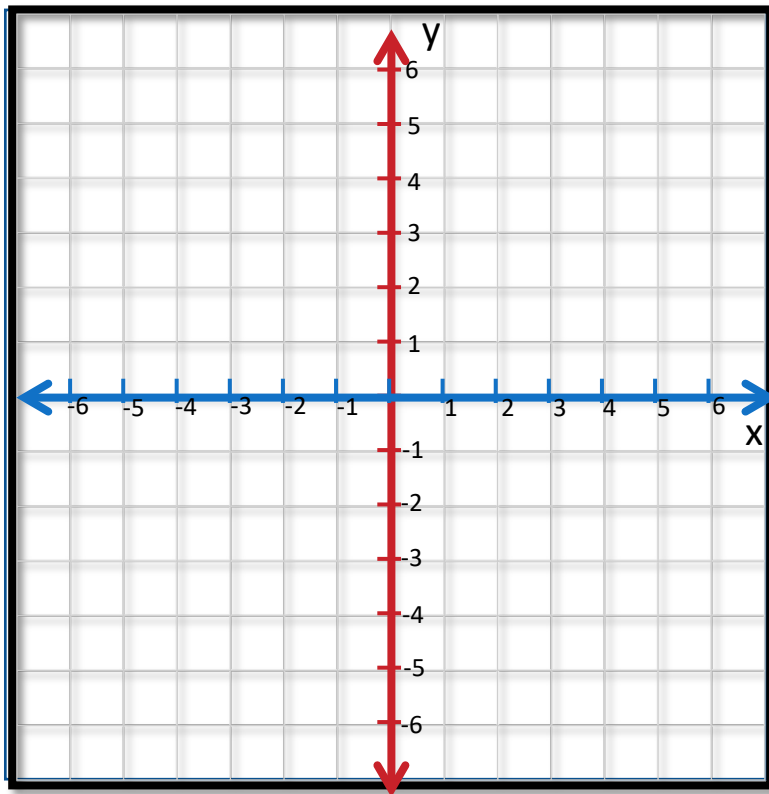


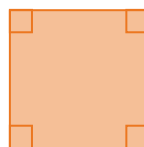
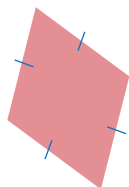
Warmup

1. Graph the equation $y = -3x + 2$

x	$Y = -3x + 2$	y
-1		
0		
1		
2		



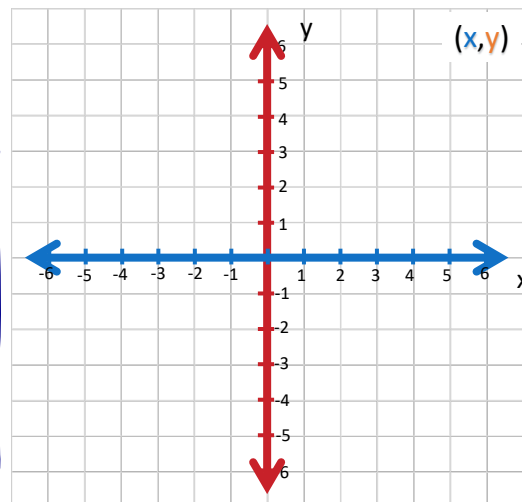
2. Identify each Quadrilateral



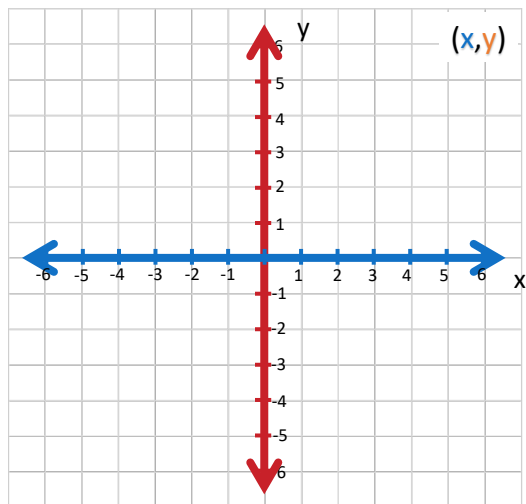
I. Graphing Shapes

To graph polygons on the cartesian (coordinate) plane:

- Graph and label each point.
 $A: (-4, 1)$, $B: (-4, 4)$, $C: (-5, 4)$, $D: (-6, 1)$
- Connect the points in the order they were given.

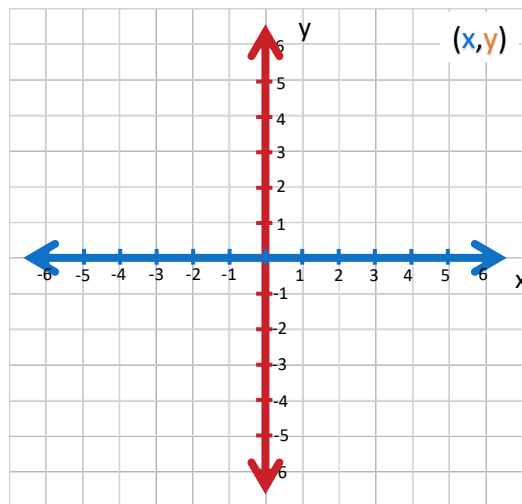


Use the points A:(1,2), B:(0,6), C:(2,6), D:(2,1) to graph a polygon, then identify it.



The shape is a _____.

3. Use the points A:(1,-4), B:(2,-6), C:(6,-6), D:(5,-4) to graph a polygon, then identify it.

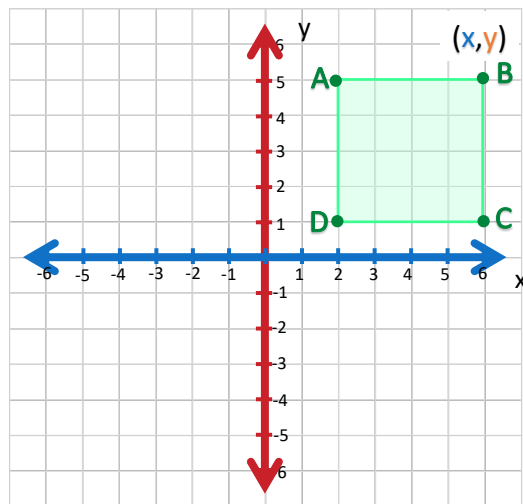


The shape is a _____.

II. Reflections over the y-axis

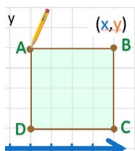
To graph the reflection of a point over the **y-axis**:
Pretend the y-axis (vertical axis) is a mirror.

1. Fold the coordinate plane in half such that the y-axis is the fold.
2. Notice where the points reflect to. The x-value of each point is multiplied by -1.

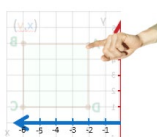


Hint: if you trace or draw the original shape with a pencil, you can rub the back of the paper when it is folded to determine the reflected point.

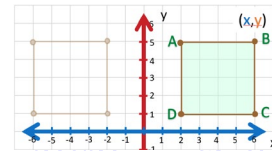
1. Trace the shape and points with a pencil



2. Fold the paper in half along the y-axis. Rub your finger on the back of the paper.

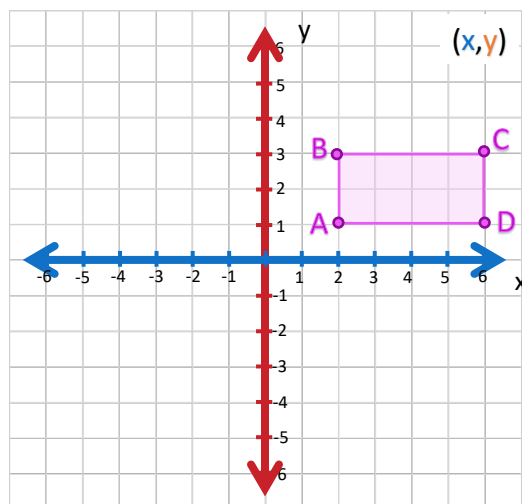


3. You can now see the reflected points.



4. Plot the reflection of the quadrilateral over the y-axis.

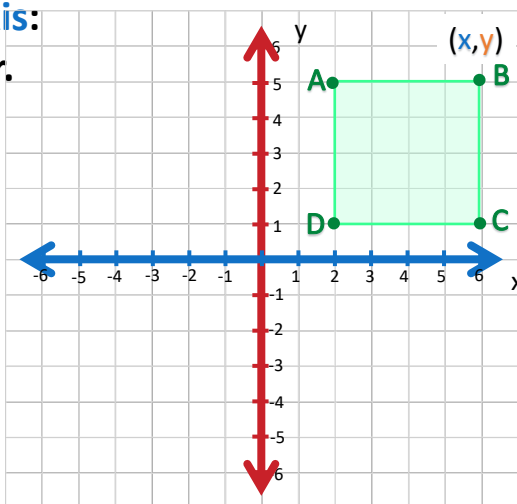
The shape is a _____.



III. Reflections over the x-axis

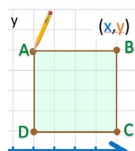
To graph the reflection of a point over the **x-axis**:
Pretend the x-axis (horizontal axis) is a mirror.

1. Fold the coordinate plane in half such that the x-axis is the fold.
2. Notice where the points reflect to. The y-value of each point is multiplied by -1.

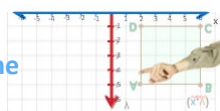


Hint: if you trace or draw the original shape with a pencil, you can rub the back of the paper when it is folded to determine the reflected point.

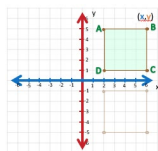
1. Trace the shape and points with a pencil



2. Fold the paper in half along the x-axis. Rub your finger on the back of the paper.

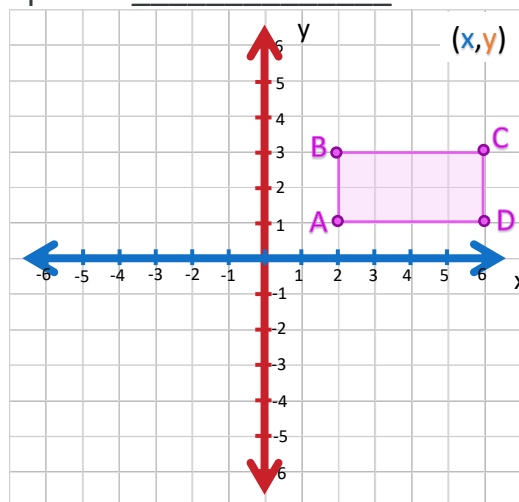


3. You can now see the reflected points.

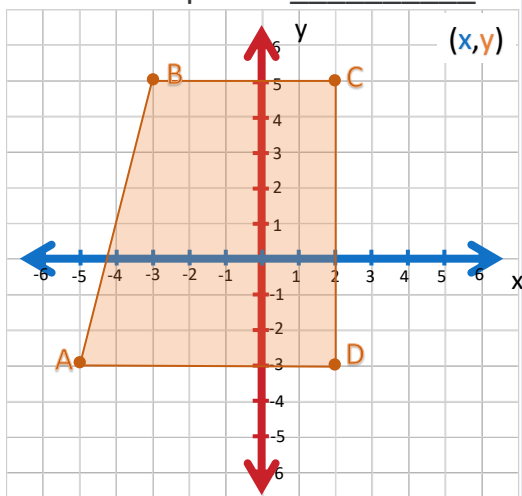


5. Plot the reflection of the quadrilateral over the x-axis.

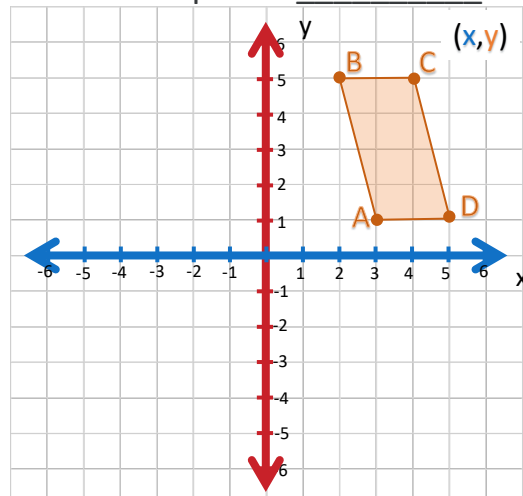
The shape is a _____.



6. Plot the reflection of the quadrilateral over the **x-axis**. The shape is a _____.

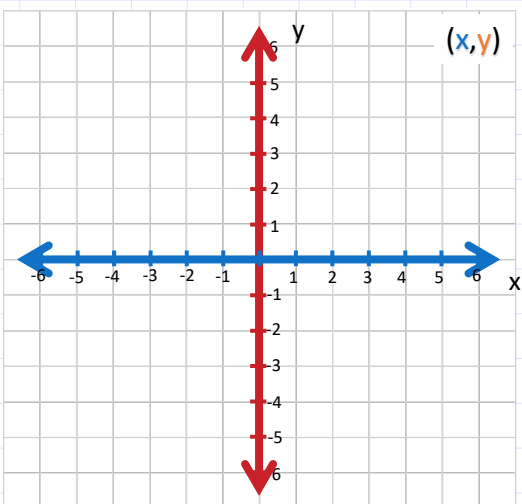


7. Plot the reflection of the quadrilateral over the **y-axis**. The shape is a _____.

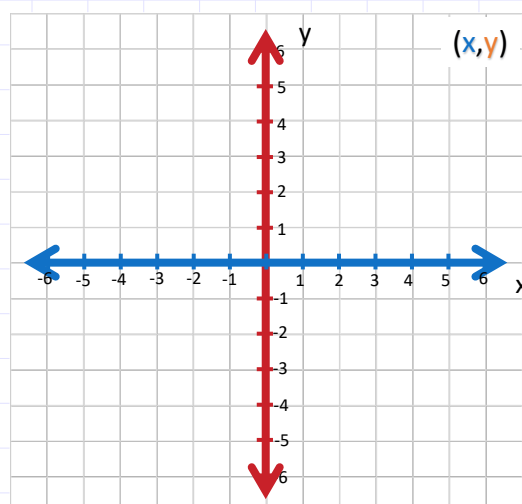


IV. Practice

8



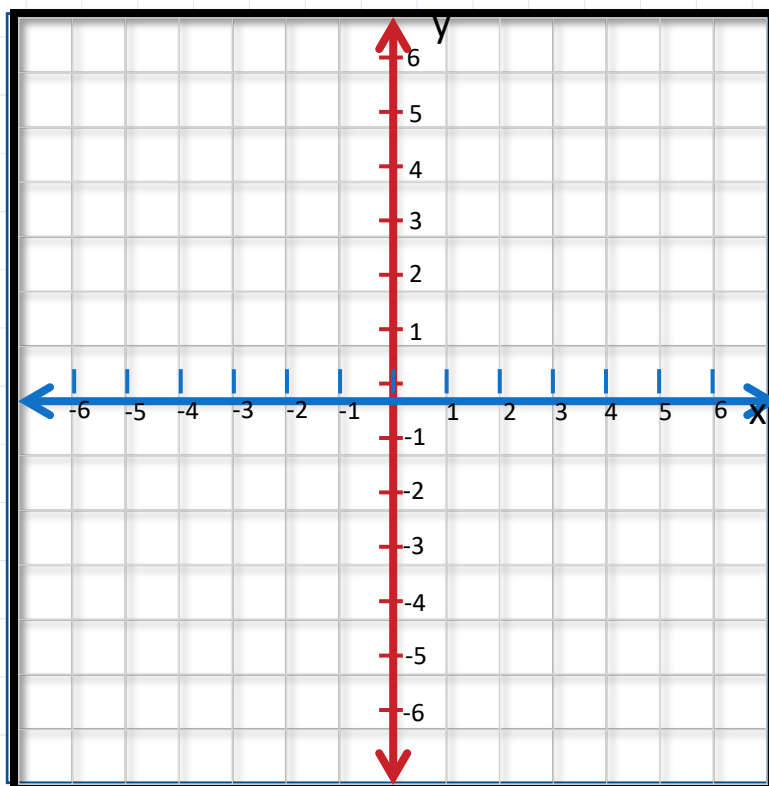
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