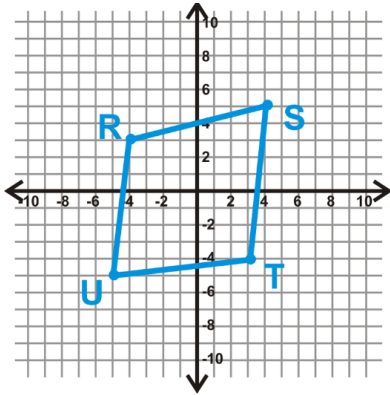


Proving shapes on the Coordinate Plane

1. Determine if the following is a parallelogram.

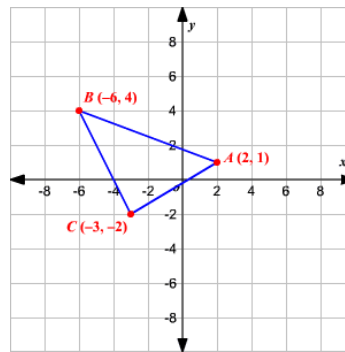
Using the property that opposite sides are parallel.



Name _____

2. Is the following a right triangle?

Explain how you know using the slope of each line.



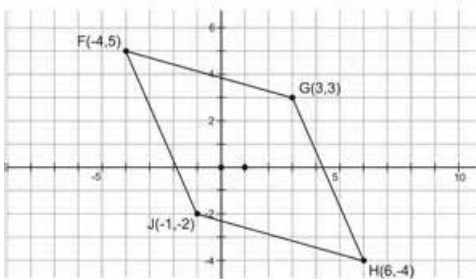
3. Determine if the shape ABCD with the following coordinates is a parallelogram.

$A(3,1)$, $B(4,3)$, $C(6, 1)$, $D(5, -1)$

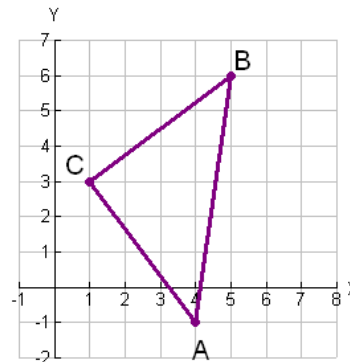
4. Determine if the shape ABC with the following coordinates is a right triangle.

$A(2, 4)$, $B(-3, -1)$, $C(3,1)$

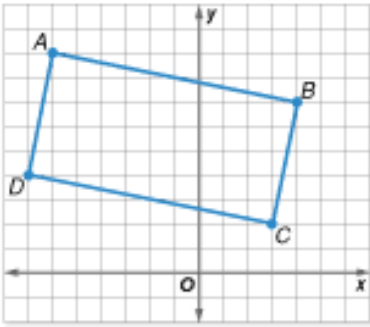
5. Determine if the following is a parallelogram.



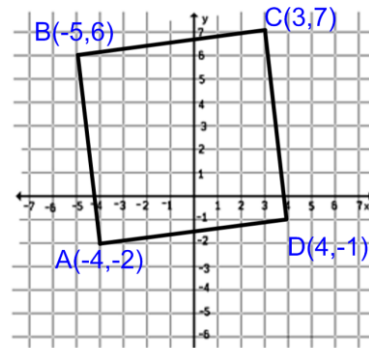
6. Determine if the following is a right triangle.



7. Prove the following figure is a rectangle.



8. Prove the following figure is a square.



9. Determine if the figure ABCD with the following coordinates is a rectangle. A(4,2) B(5,5) C(11,3) D(10,0)

10. Determine if the figure ABCD with the following coordinates is a square. A(1,3) B(3,5) C(1,7) D(-1,5)

11. Determine if the figure DEFG with the following coordinates is a rectangle. D(1,1) E(2,3) F(3,5) G(-1, -2)

12. Determine if the figure DEFG with the following coordinates is a square. D(2,6) E(3,7) F(4,5) G(3,4)