Geometry CC – Mr. Valentino Name: _____

Unit 10 Lesson 6: Proving Squares on the Coordinate Place Date: _____ Per: _____

And now…**SQUARES** on the Coordinate Plane 🙌

**Do Now:** List the 2 ways that you can prove a parallelogram is a square:

1. _____

_____

2. _____

_____

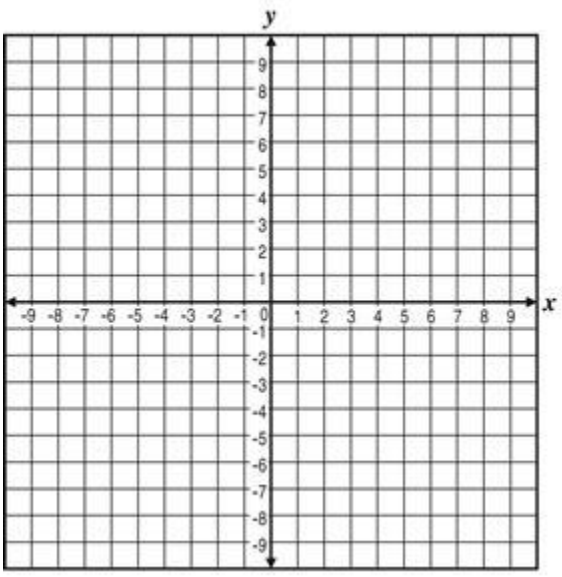
**Therefore,** we are going to first prove that the quadrilateral is a _____ using

_____,which is going to tell us a <u>great</u> amount of useful information about the quadrilateral.

Let's do it!

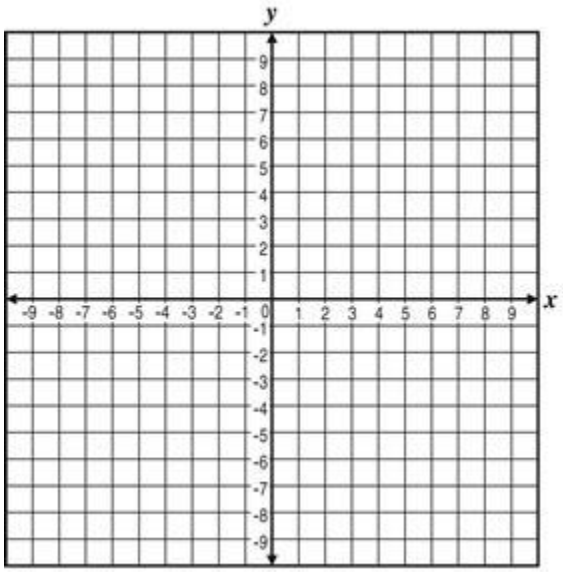
1. Quadrilateral DANC has vertices D(-1,0), A(3,3), N(6,-1), and C(2,-4).

Prove that DANC is a square.

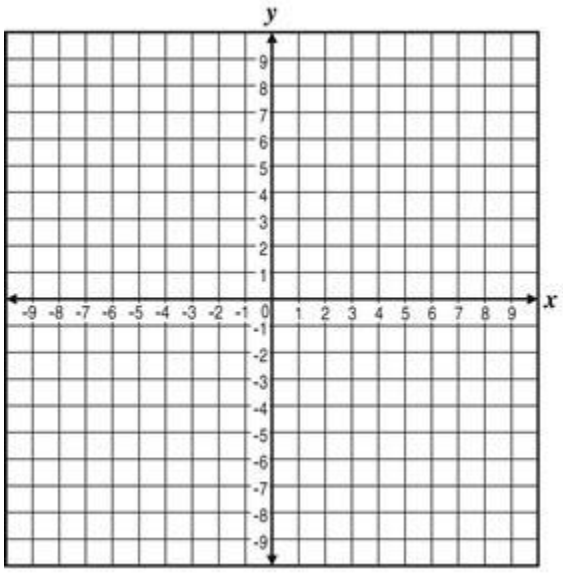


2. Quadrilateral LOVE has vertices L(-2,-1), O(1,6), V(8,3), and E(5,-4).

Prove that LOVE is a square.




3. Mr. Valentino is experimenting with a new drawing program on his computer. He created quadrilateral TINO with coordinates T(-2,3), I(-5,-4), N(2,-1), and O(5,6). Mr. Valentino believes that he has created a rhombus but not a square. Prove that Mr. Valentino is correct.



4. Quadrilateral ABCD has vertices A(1,1), B(-2,5), C(3,5), and D(6,1). Prove that quadrilateral ABCD is a rhombus and prove that it is not a square.