I can determine if a figure is a parallelogram.

Parallelogram Definition: a quadrilateral with both pairs of opposite sides parallel

The quadrilateral on the screen meets the parallelogram definition above.

- 1. What should you measure to confirm that the quadrilateral is in fact a parallelogram based on the definition? Write down those measurements below.
- 2. Using the other measurements on the diagram, list observations about additional properties of parallelograms.

Parallelograms have:		
1.		
2.		
3.		
4.		
5.		

Slope:	Distance Formula/Pythagorean Thm:
What can slope tell us?	What can distance/Pythagorean Thm tell us?

Using what you've learned:

1. Does the quadrilateral formed by the following points fit the properties that we found to be true for parallelograms today? Show mathematical evidence to support your answer.

The vertices of ABCD are A(-5, -3), B(5, 3), C(7, 9), and D(-3, 3).



2. A parallelogram is formed by the vertices A(1, 1), B(6, 2) and C(2, 4). Find the possible coordinates for the fourth vertex D based on the definition of a parallelogram.

