$\qquad$ Learning Objective(s)

## Main Ideas/ Questions

Using Distance and Slope

## Notes

Characteristics of ALL Types of Parallelograms:

- Parallelogram -
- Rhombus -
- Rectangle -
- Square -

Proving Congruent Sides - Find the $\qquad$
Proving Parallel Sides - Find slopes that are the $\qquad$
Proving Right Angle - Find slopes that are $\qquad$
Examples

1. Prove that the quadrilateral with the coordinates $L(-2,3), M(4,3)$, $N(2,-2)$, and $O(-4,-2)$ is a parallelogram.


Topic: Proving Types of Quadrilaterals on the Coordinate Plane

## Date:

$\qquad$

Main Ideas/ Questions
Examples

## Notes

2. Prove a quadrilateral with vertices $\mathrm{G}(1,1), \mathrm{H}(5,3), \mathrm{I}(4,5)$, and $J(0,3)$ is a rectangle.

3. Prove that the quadrilateral with vertices $A(-1,0), B(3,3), C(6,-1)$, and $D(2,-4)$ is a square.


## Summary

Summarize the lesson in your own words with the help of the guided questions.

How do you prove different types of parallelograms on the coordinate plane?

