Topic: Proving Types of Parallelograms on the Coordinate Plane   **Date**: _____

Learning Objective(s)_____:

_____

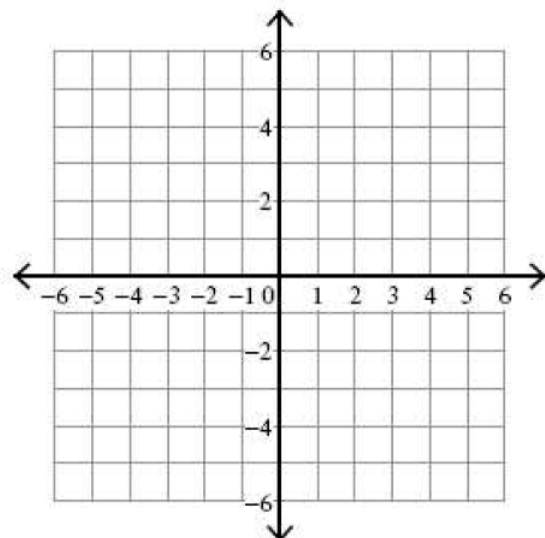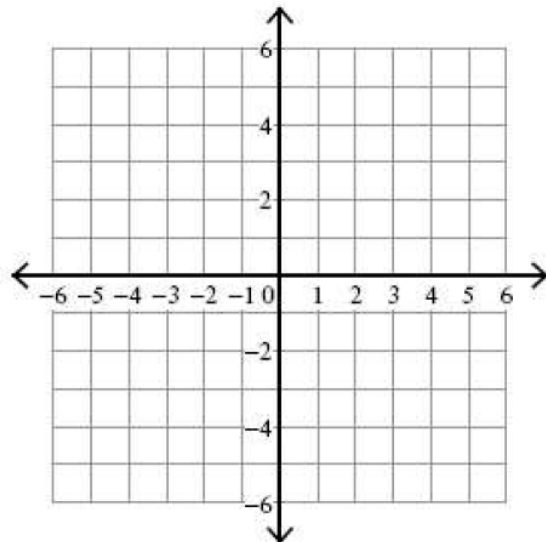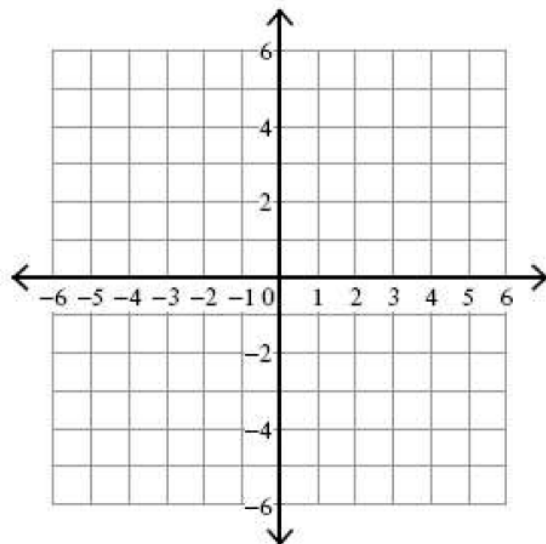| Main Ideas/ Questions	Notes
Using Distance and Slope	**Characteristics of ALL Types of Parallelograms:** • Parallelogram – • Rhombus – • Rectangle – • Square – **Proving Congruent Sides** – Find the _____ **Proving Parallel Sides** – Find slopes that are the _____ **Proving Right Angle** – Find slopes that are _____
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**.

| **Main Ideas/**
Questions

Examples | **Notes** |

Notes

2. Prove a quadrilateral with vertices W(1, 1), X(5, 3), Y(4, 5), and Z(0, 3) is a **rectangle**.

3. Prove a quadrilateral with vertices G(-3, 1), H(1, 4), I(1, -2), and J(5, 1) is a **rhombus**.

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