Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Coordinate Proofs.

Prove or disprove each situation. Must show work to receive full credit.

1) Prove or disprove that the quadrilateral defined by the points (5,3), (3.5), (3,1), (1,3) is a square.

2) Prove or disprove that the quadrilateral defined by the points (4,0), (0,3), (0,-3), (-4,0) is a rhombus.

3) Prove or disprove that the quadrilateral defined by the points (6,4), (1,3), (3,2), (-2,1) is a parallelogram.

4) Prove of disprove that the quadrilateral defined by the points (5,3), (5,8), (2,2), (1,5) is a kite.

5) Prove of disprove that the quadrilateral defined by the points (0,-2), (-1,1), (-3,-3), (-4,0) is a square.

6) Prove or disprove that the quadrilateral defined by the points (7,2), (5,4), (4,1), (2,3) is a rhombus.

7) Prove or disprove that the quadrilateral defined by the points (5,-1), (6,3), (1,1), (2,5) is a parallelogram.

8) Prove or disprove that the quadrilateral defined by the points (6,2), (3,4), (4,-1), (1,1) is a rectangle.