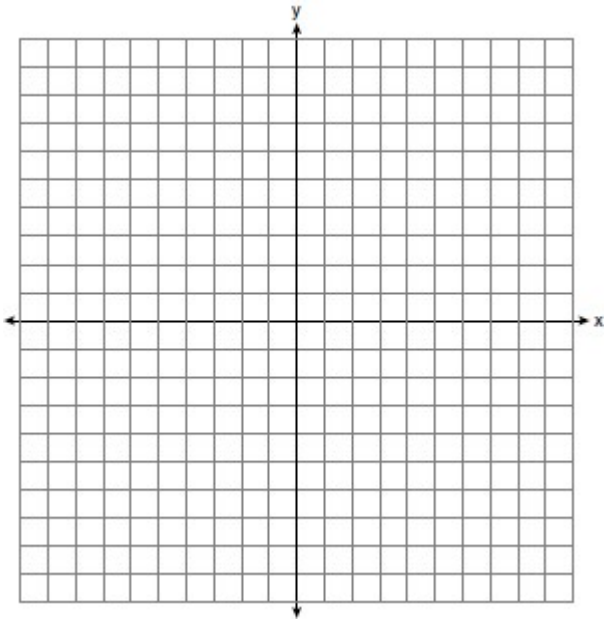
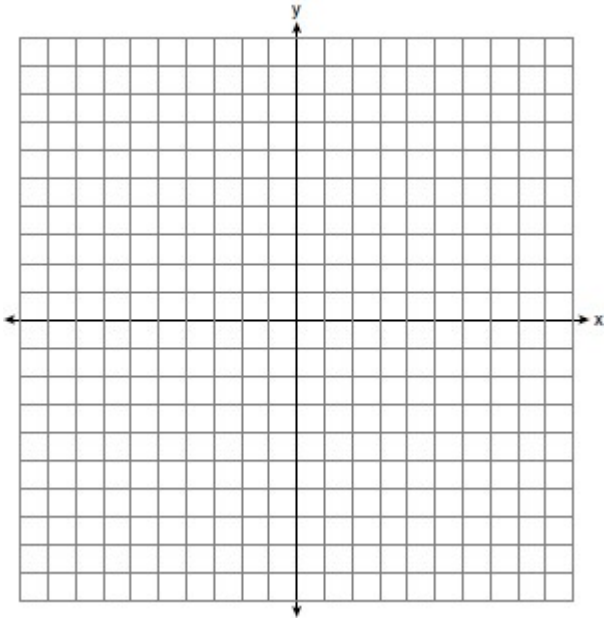
Name _____ Date _____
Mr. Schlansky Geometry

Parallelogram Coordinate Geometry Proofs

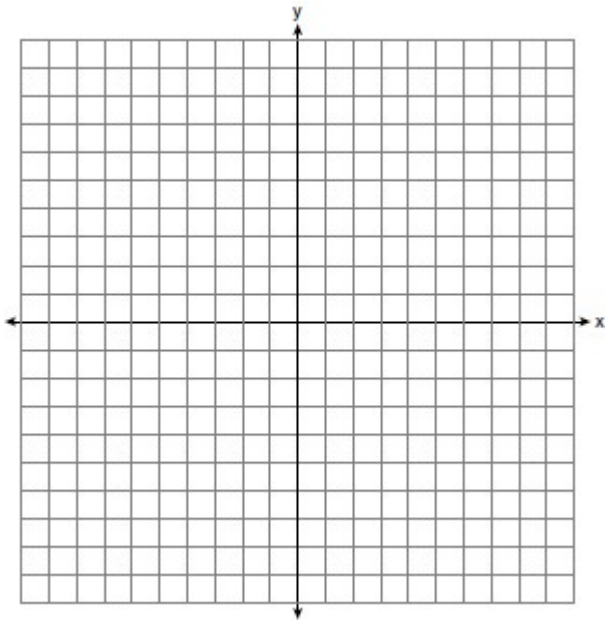
1. Quadrilateral MATH has vertices M(-2, -3), A(-1, -1), T(4, 2), and H(3, 0). Prove that MATH is a parallelogram.



2. Quadrilateral WEAK has vertices W(-3,2), E(-3, 7), A(4,7), and K(4,2). Prove that quadrilateral WEAK is a rectangle.



3. The coordinates of the vertices of quadrilateral ABCD are A(2,0), B(6,-4), C(10,0), and D(6,4). Prove that quadrilateral ABCD is a square.



4. Quadrilateral FRDY has vertices F(-2, -8), R(7,-1), D(10,10) and Y(1,3). Using coordinate geometry, prove that quadrilateral FRDY is a rhombus but *not* a square.