

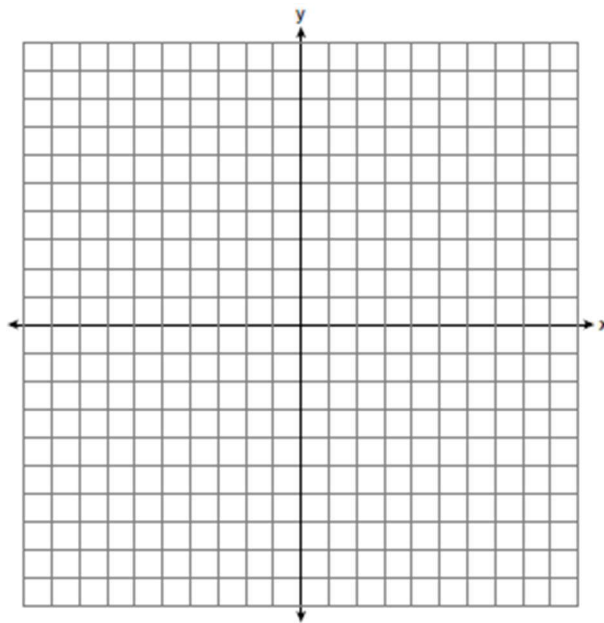


Name _____
Mr. Schlansky

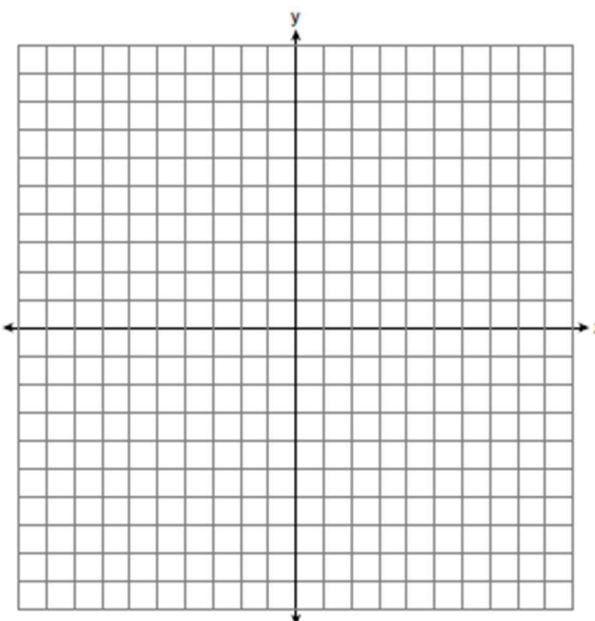
Date _____
Geometry

Parallelogram Coordinate Geometry Proofs

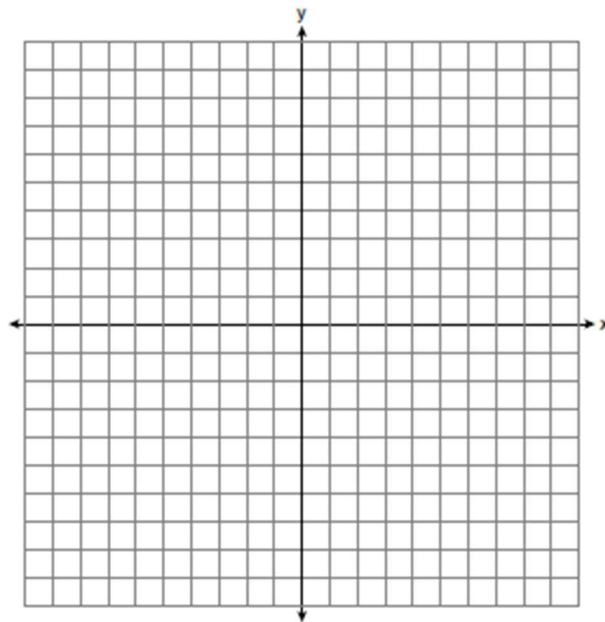
1. Quadrilateral *MATH* has vertices $M(-2, -3)$, $A(-1, 1)$, $T(4, 4)$, and $H(3, 0)$. Prove that *MATH* is a parallelogram.



1. Quadrilateral *WEAK* has vertices $W(-3, 2)$, $E(0, -3)$, $A(10, 3)$, and $K(7, 8)$. Prove that quadrilateral *WEAK* is a rectangle.



3. The coordinates of the vertices of quadrilateral $ROCK$ are $R(-7,4)$, $O(-2,9)$, $C(5,8)$, and $K(0,3)$. Prove that quadrilateral $ROCK$ is a rhombus.



4. 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.

