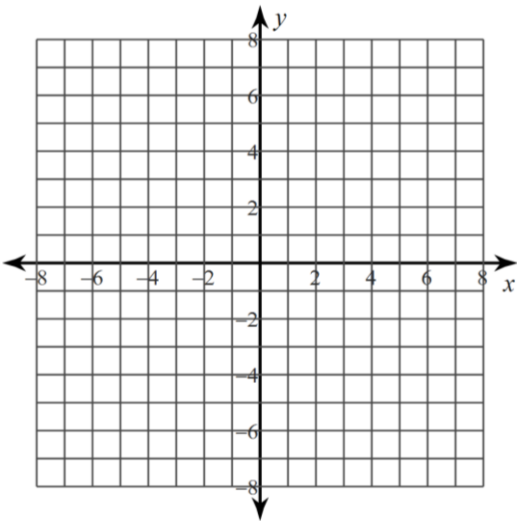
 Name: _____

6.1 ~ Parallelograms on the Coordinate Plane

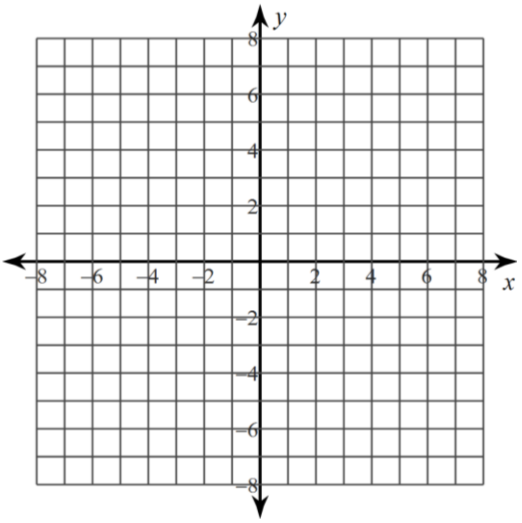
Past due on: _____ Period: _____

1. Three vertices of parallelogram *ABCD* are $B(-3,3), C(2,7), \& D(5,1)$. Graph these vertices. Use slopes to find the coordinates of vertex *A*.



Show that the quadrilateral, with the given vertices, is a parallelogram using the indicated method. **SHOW ALL WORK.**

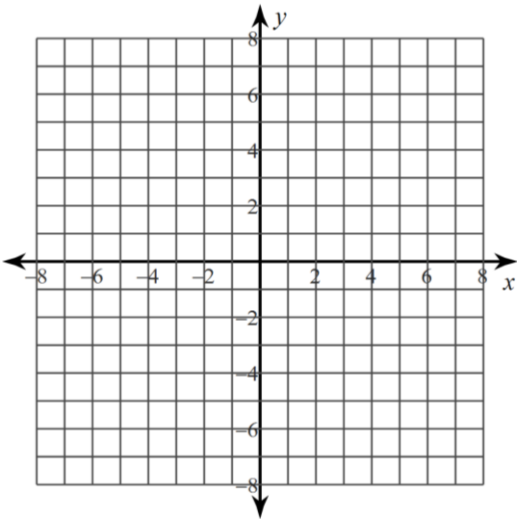
2. $J(-1,0), K(-3,7), L(2,6), \& M(4,-1)$
   Definition of parallelogram



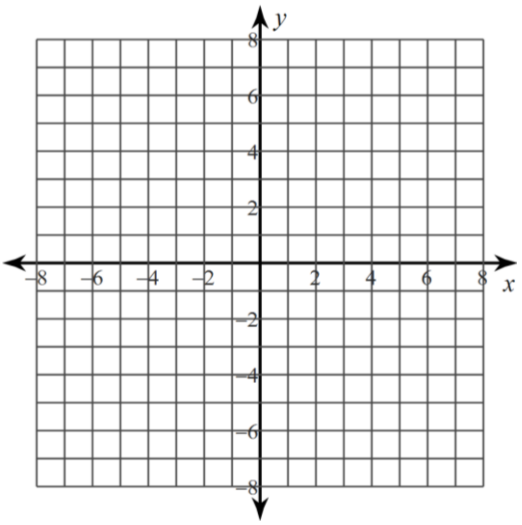
$m_{JK} =$ $m_{KL} =$

$m_{LM} =$ $m_{MJ} =$

3. $R(-1,-5), S(-2,-1), T(4,-1), \& U(5,-5)$
   The diagonals bisect each other



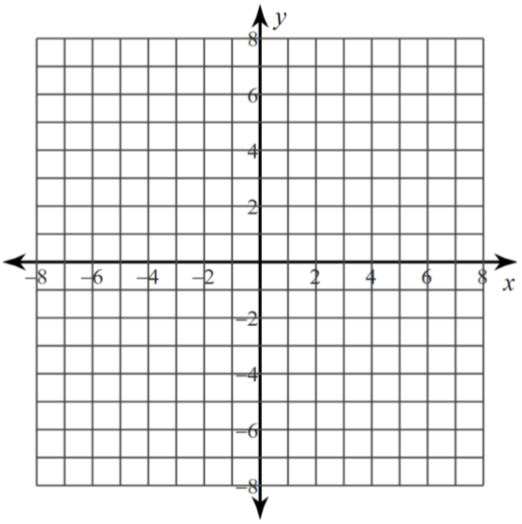
4. $W(-5,-2), X(-3,3), Y(3,5), \& \ Z(1,0)$
   One pair of opposite sides are both parallel & congruent



$m_{WX} =$ $m_{YZ} =$

$WX =$ $YZ =$

5. $A(2,2), B(1,-3), C(-4,2), \& \ D(-3,7)$
   Both pairs of opposite sides are congruent



$AB =$ $BC =$

$CD =$ $DA =$