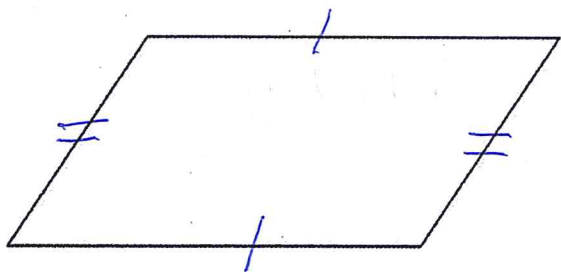


Name Schlansky  
Mr. Schlansky

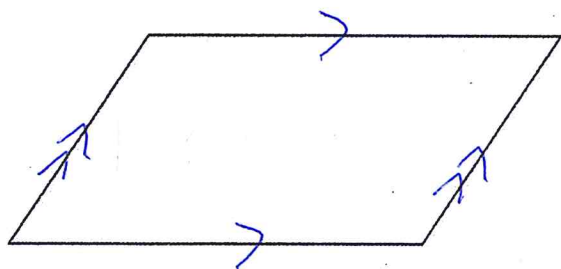
Date \_\_\_\_\_  
Geometry

## How to Prove Parallelograms?!

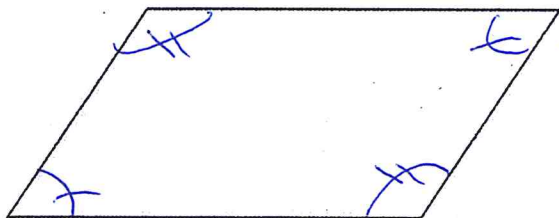
Mark the five ways to prove parallelograms, 2 ways to prove rectangles, 3 ways to prove rhombuses, and write the property next to it.



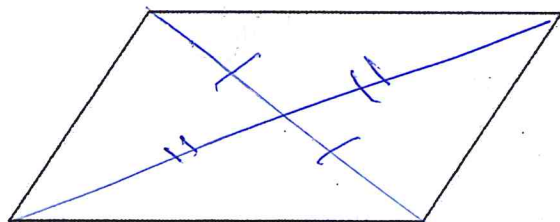
Two pairs of opposite sides are congruent



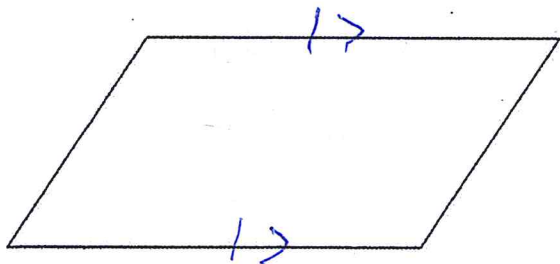
Two pairs of opposite sides are parallel



Two pairs of opposite angles are congruent



Diagonals bisect each other



One pair of opposite sides are congruent and parallel.

Distance Formula

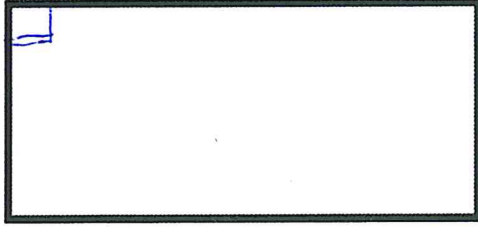
Slope Formula

Midpoint Formula

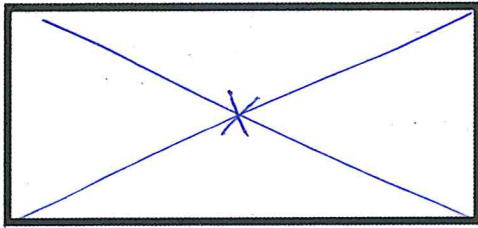
$$d = \sqrt{\Delta x^2 + \Delta y^2}$$

$$m = \frac{\Delta y}{\Delta x}$$

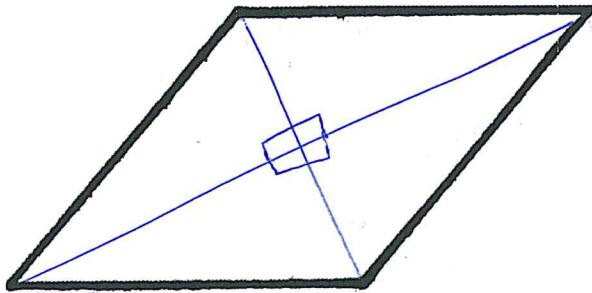
$$MP = \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$



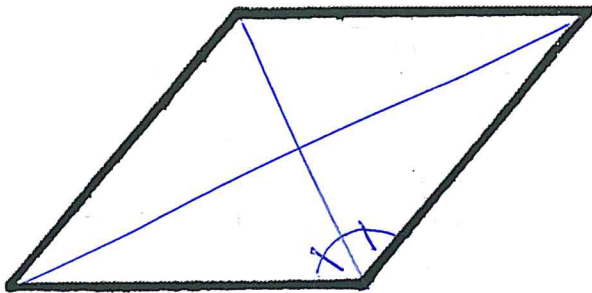
A right angle  
(consecutive sides perpendicular)



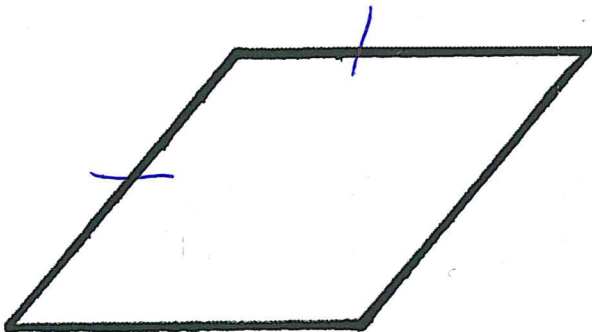
Congruent diagonals



diagonals are perpendicular  
to each other



diagonals bisect the  
angles



consecutive sides  
are congruent

**How do you prove a square?**

Prove a property of the parallelogram, rectangle, and rhombus