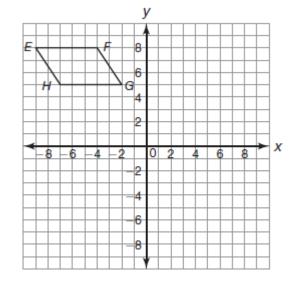
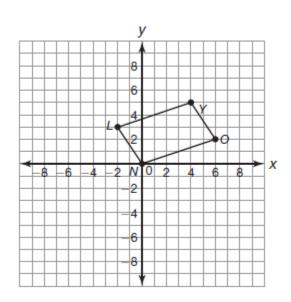
1a. Prove quadrilateral EFGH is a parallelogram. (Hint: you must show the opposite sides are parallel) Algebra:



**Summary Sentences:** 

b. Find the perimeter of EFGH.

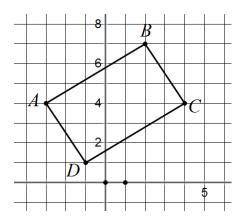
2a. Prove quadrilateral LYON is a parallelogram.



b. Find the area of LYON.

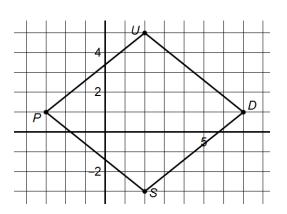
- 3. A *Rectangle* is a quadrilateral with 4 right angles.
- a. Is quadrilateral ABCD a *Rectangle*? Justify your response.

(Hint: Use slope to determine if the angles are right.)



b. In geometry, it is **NEVER** good to use "because it looks that way in the picture" as a justification for your reasoning. Use this rectangle example to explain why it is necessary to show evidence that backs up your reasoning.

- 4. A *Rhombus* is a quadrilateral with 4 congruent sides.
- a. Prove SPUD is a Rhombus.



c. Do the diagonals of Rhombus SPUD bisect each other? Justify your response.