

Proving that a quadrilateral is a rectangle:

1. If a parallelogram has one or more right angles, it is a rectangle.
2. If a parallelogram has diagonals that are congruent, then it is a rectangle.
3. Definition:

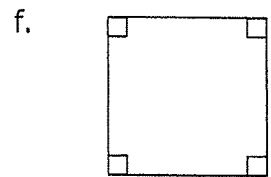
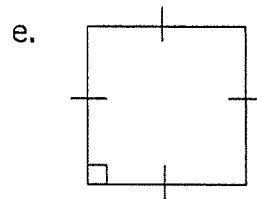
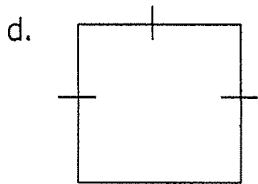
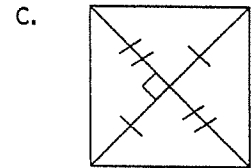
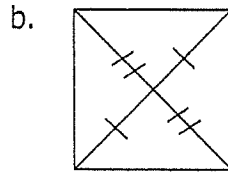
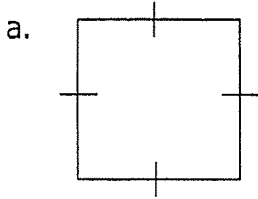
Proving that a quadrilateral is a rhombus:

1. If a parallelogram has one pair of consecutive sides that are congruent, then it is a rhombus.
2. If a parallelogram has diagonals that are perpendicular, then it is a rhombus.
3. If a parallelogram has a diagonal that bisects two opposite angles, then it is a rhombus.
4. Definition:

One more method of proving that a quadrilateral is a parallelogram:

5. Show that one angle is supplementary to two consecutive angles.

1. Identify the quadrilateral, be as specific as you can. Justify your answer.



Geometry (H)

Section 5.4 – Special Parallelograms

Directions: Graph each quadrilateral then identify whether it is a: rectangle, rhombus, square, or parallelogram. You must use slope and/or distance to verify.

1. D(-2,2)    O(2,5)    G(2,0)    S(-2,-3)

2. M(-1,4)    A(-3,2)    R(2, -3)    S(4,-1)