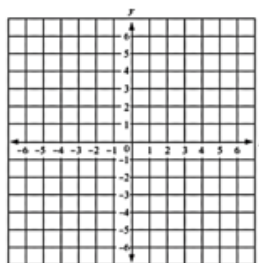Name: _____

Ways to Prove a Parallelogram:

1. Prove both pairs of opposite sides are parallel.

2. Prove one pair of opposite sides are parallel and congruent.

3. Prove both pairs of opposite sides are congruent.

4. Prove both pairs of opposite angles are congruent.

5. Prove one angle is supplementary to both of its consecutive angles.

6. Prove the diagonals bisect each other.

Given: A(2, 2), B(–4, –2), C(–2, –7), & D(4, –3)

Prove: ABCD is a parallelogram in 4 different ways

To prove a quadrilateral is a rectangle…

1) **First prove it is a parallelogram.** Then prove parallelogram contains at least one right angle.

OR

2) **First prove it is a parallelogram.** Then, the diagonals of a parallelogram are congruent.

OR

3) You could prove that all four angles are right angles.

Given: A(−2, 3), B(4, 3),
       C(4, −1), & D(−2, −1)

Prove: ABCD is a
      rectangle in 2
      different ways