

8.4 Props of Rhombuses, Rectangles

If a parallelogram has 4 congruent sides, it is a Rhombus { Squares



If a parallelogram has 4 congruent angles (4 90° -right angles), it is a rectangle



If a parallelogram has 4 congruent sides { angles, it is a square.



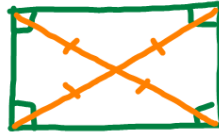
Diagonals

Rhombus



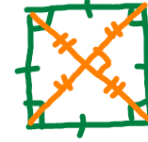
- Bisect each other
- Make 90° angle (perpendicular)

Rectangle



- Bisect to form 4 \cong segments

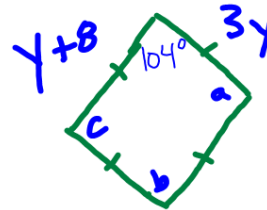
Square



- Bisect each other
- All 4 are Congruent
- Are perpendicular

Σ examples

① Find a, b, c, y given:



$$a = 180 - 104 = 76^\circ$$

$$b = 104^\circ \text{ (opposite } 104^\circ)$$

$$c = 76^\circ \text{ (same as } a)$$

$$3y = y + 8 \text{ (Sides are =)}$$

$$2y = 8$$

$$y = 4$$