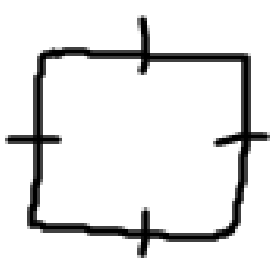
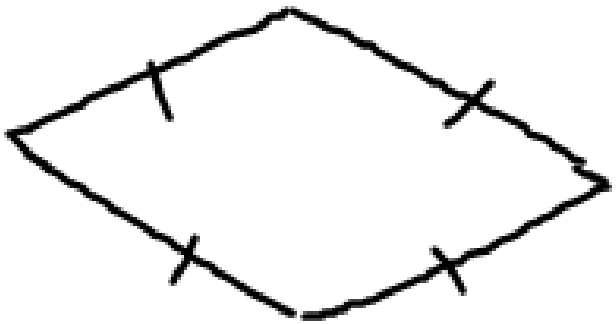
# 8 - 5
# Rhombi and Squares

**rhombus:** quad. w/ 4 ≅ sides





**Theorem 8.15:**

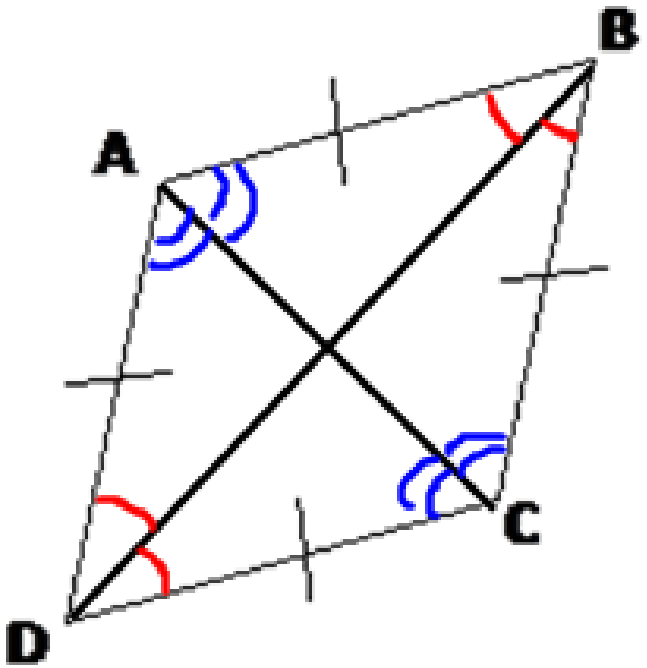
The diagonals of a rhombus are perpendicular .

**Theorem 8.16:**

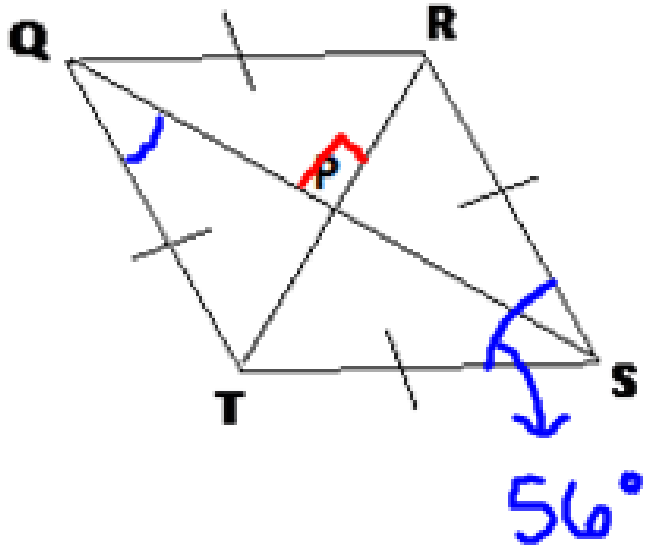
If the diagonals of a parallelogram are perpendicular, then the parallelogram is a rhombus.

## Theorem 8.17:

**Each diagonal of a rhombus** bisects a pair of opposite angles.



# Ex: QRST is a rhombus




A.) Find y if

$m\angle QPR = y^2 - 31$

$y^2 - 31 = 90$

$+31 \quad +31$

$\sqrt{y^2} = \sqrt{121}$

$y = \pm 11$

B.) Find $m\angle TQS$ if $m\angle RST = 56$

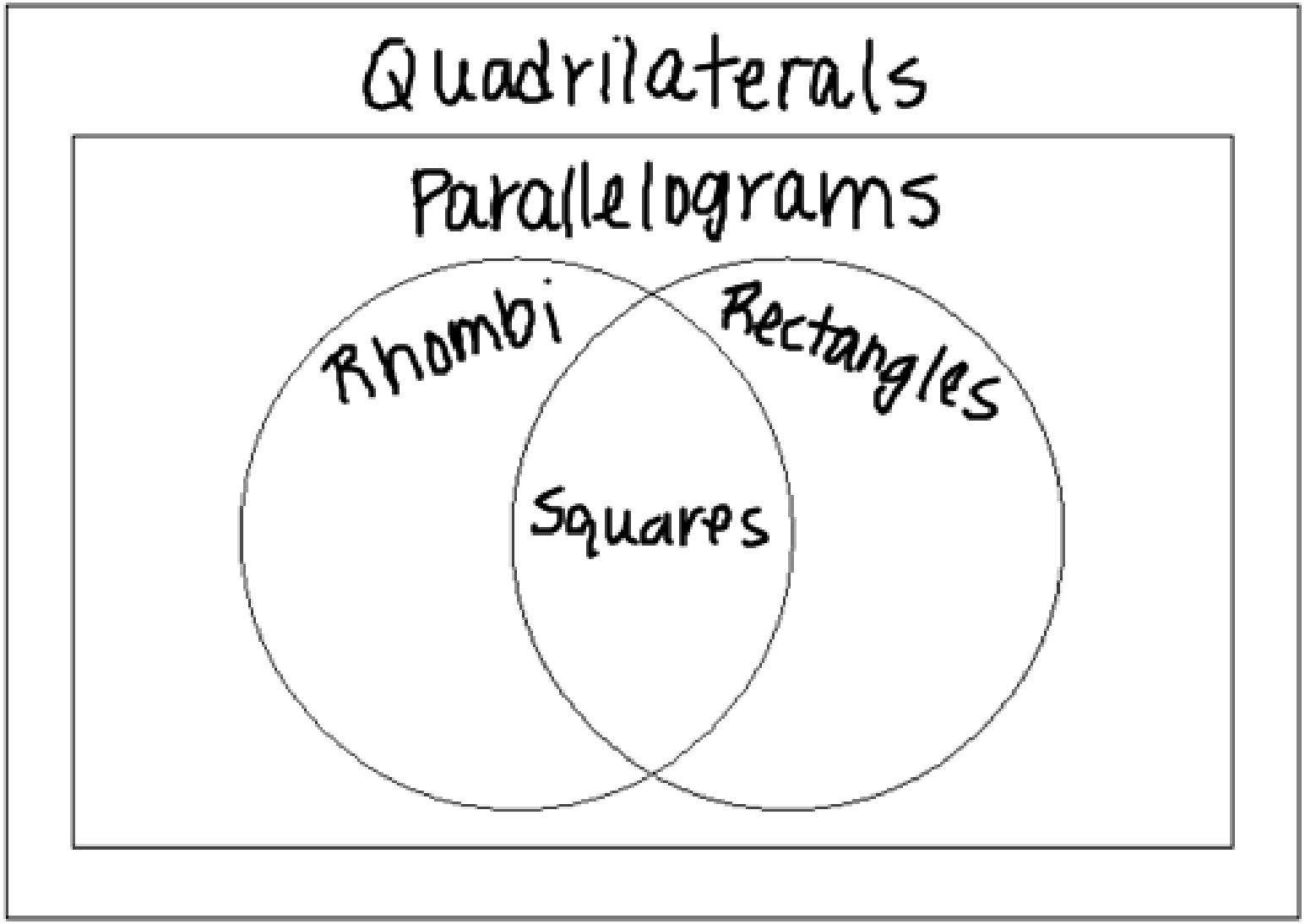
$56 \div 2 = 28°$

**square**: quadrilateral with

4 ≅ sides and 4 right angles

rhombus

rectangle


Quadrilaterals
Parallelograms
Rhombi
Rectangles
Squares

Homework:

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