

**TAKS Objective 7**  
**TEK 8.7B**  
**Tutorial**  
**(Grades 9 and 10)**

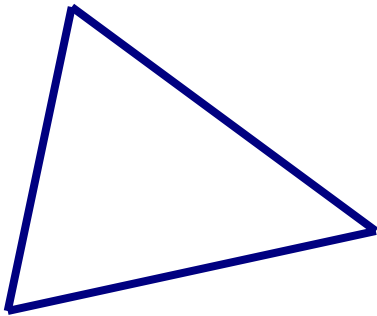
...use geometric concepts and properties to solve problems in fields such as art and architecture.

# Types of Triangles

Describe each triangle.

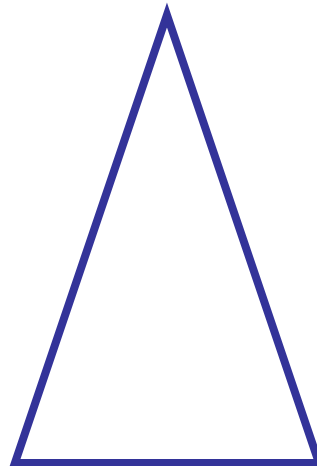
scalene

no equal sides



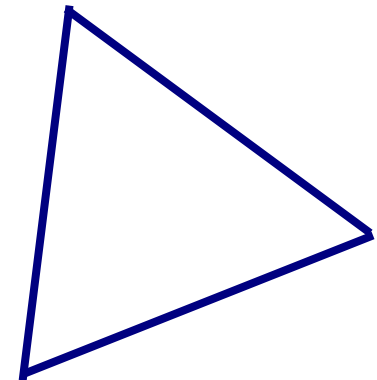
isosceles

at least two  
equal sides



equilateral

three  
equal sides

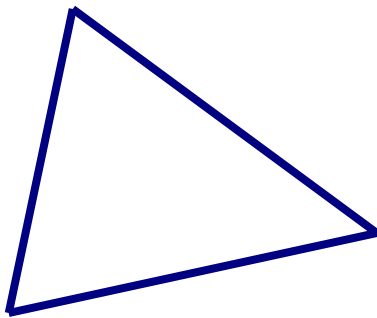


# Types of Triangles

Describe each triangle.

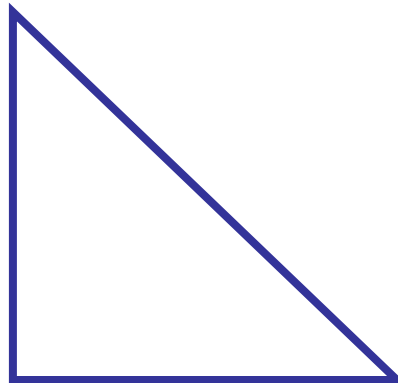
acute

all acute  
angles



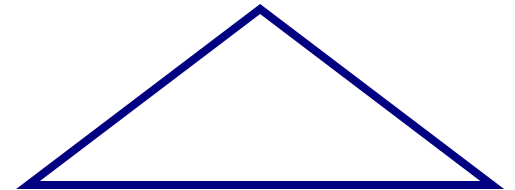
right

one right  
angle



obtuse

one obtuse  
angle

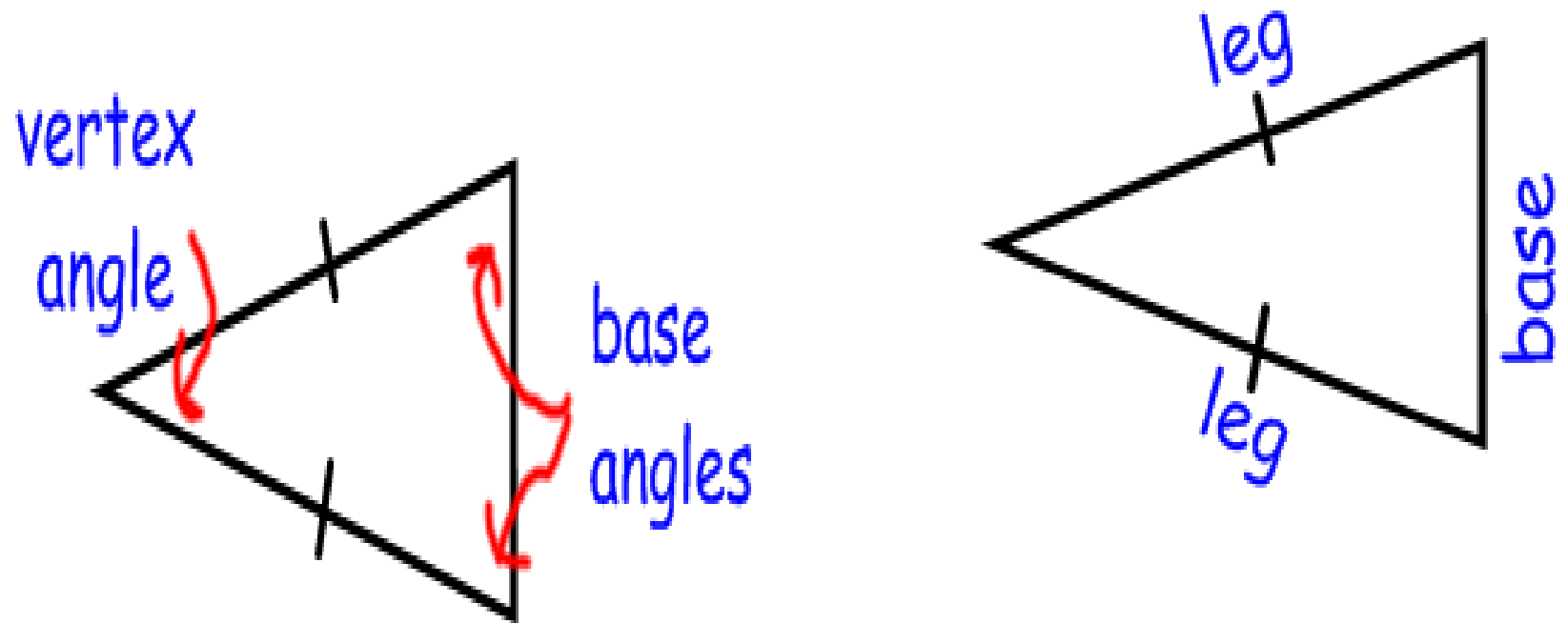


The angles of any triangle  
add up to 180  
degrees.

The angles of any quadrilateral  
add up to 360  
degrees.

# Isosceles Triangles

Base angles are congruent.

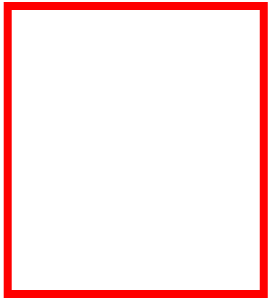


# Equilateral Triangles

All angles are congruent and have a measure of 60 degrees.

# Quadrilaterals

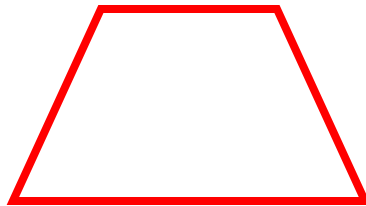
square



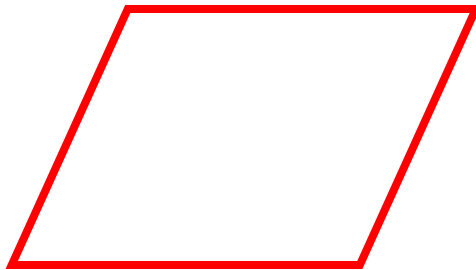
rectangle



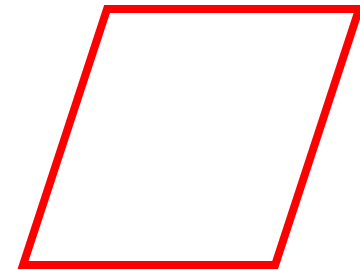
trapezoid



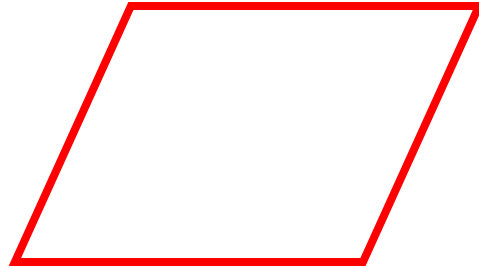
parallelogram



rhombus



# Parallelograms



Opposite sides are congruent.

Opposite sides are parallel.

Opposite angles are congruent.

Consecutive angles add up to 180.

# Rectangles

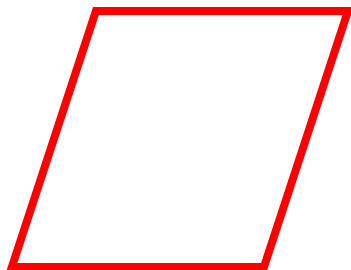


Opposite sides are congruent.

Opposite sides are parallel.

All angles are 90 degrees.

# Rhombus



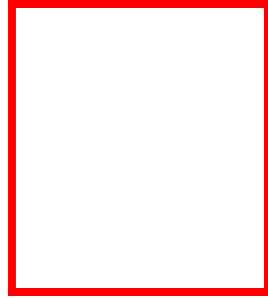
All sides are congruent.

Opposite sides are parallel.

Opposite angles are congruent.

Consecutive angles add up to 180.

# Squares



All sides are congruent.

Opposite sides are parallel.

All angles are 90 degrees.

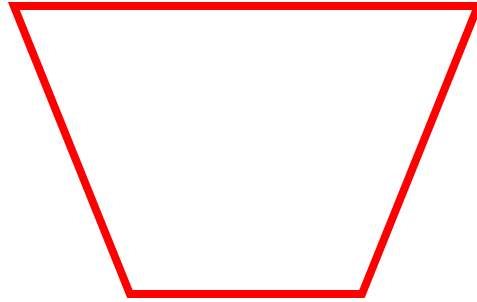
# Trapezoids



One pair of opposite sides are parallel.

Consecutive angles add up to 180.

# Isosceles Trapezoids



The congruent sides are called legs.

The parallel sides are called bases.

Each pair of base angles are  
congruent.