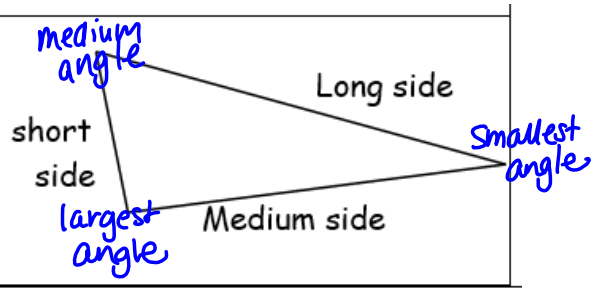
	Scalene	Isosceles	Equilateral
By number of congruent sides	none acute (all 3) Right (1) obtuse (1)	two base base angles Right obtuse Base angles are congruent	three

THEOREM	EXAMPLES
Triangle angle sum theorem: The sum of the interior angles of every triangle is 180°.	50°, 100°, 30° = x 180° − 100° − 50° = 30°
Triangle Inequality Theorem: The length of the longest side must be less than the sum of the lengths of the two shorter sides.	Can these three side lengths make a triangle? yes 3 cm., 10 cm., 12 cm. 3 + 10 ? 12 13 > 12

Side-Angle inequality Conjecture:

The smallest angle is opposite the shortest side.