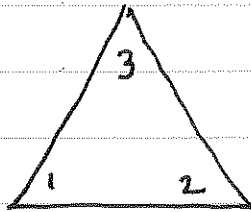


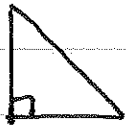
3-4 // Lines and the Triangle - Angle Sum Theorem



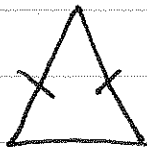
$$\angle 1 + \angle 2 + \angle 3 = 180^\circ$$

Name Δ s by sides

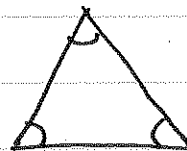
Name Δ s by \angle s



Right



Isosceles
- 2 \cong sides



Equiangular
- all $\cong \angle$ s



Scalene
- no \cong sides



Acute
all \angle s $< 90^\circ$



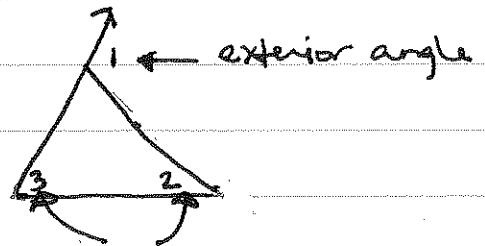
Equilateral
- all \cong sides



Obtuse
one \angle that is $> 90^\circ$

Exterior \angle of a polygon

angle formed by a side of an extension of an adjacent side



Remote interior angles

remote interior angles

The two nonadjacent interior angles

Triangle Exterior Angle Theorem

$$m\angle 2 + m\angle 3 = m\angle 1$$