

Unit 3-Triangles Notes

Name: 3rd

Parts of a Triangle:

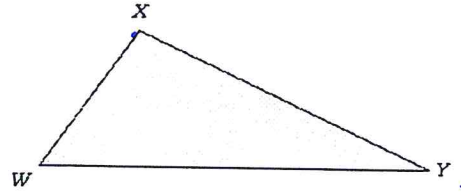
Triangle - a three-sided polygon

Name -  $\Delta WXY, \Delta YXW$

Sides -  $XW, XY, WY$

Vertices - Two lines meet (3)

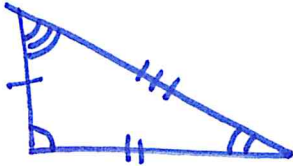
Angles -  $\angle X, \angle Y, \angle W$



Sum of the Angles of a Triangle  $m\angle X + m\angle Y + m\angle W = \underline{180^\circ}$

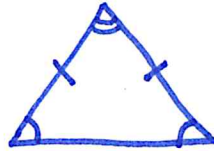
Classifying Triangles by Sides:

Scalene  $\Delta$



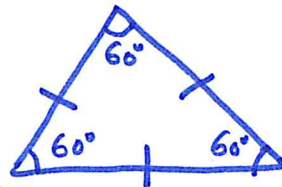
each side and angle is different.

Isosceles  $\Delta$



Two sides and two angles are Congruent.

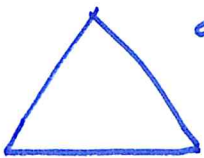
Equilateral  $\Delta$



All sides and Angles are Congruent

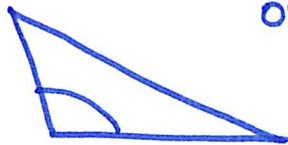
Classifying Triangles by Angles:

Acute  $\Delta$



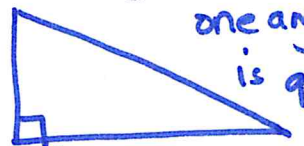
all angles  $< 90^\circ$

Obtuse  $\Delta$



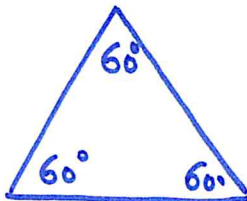
one angle  $> 90^\circ$

Right  $\Delta$

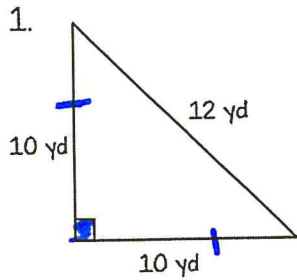


one angle is  $90^\circ$

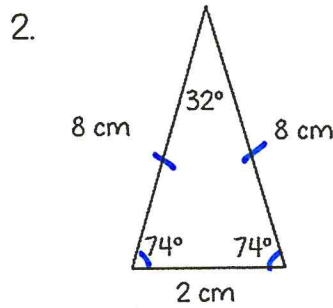
Equiangular  $\Delta$  -



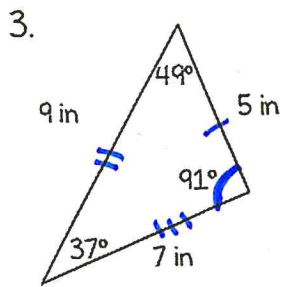
all angles are equal to  $60^\circ$



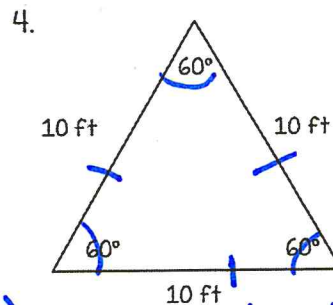
right triangle  
isocetes triangle  
"Right isocetes triangle"



Acute Triangle  
isocetes triangle  
"Acute isocetes triangle"



Abtuse Triangle  
Scalene triangle  
"Abtuse Scalene triangle"



(Acute) equiangular triangle  
equilateral triangle