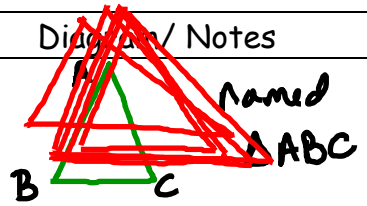
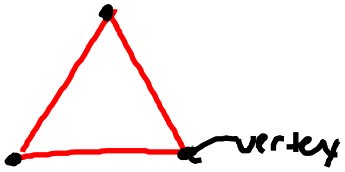
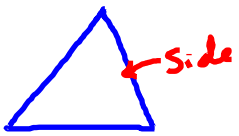
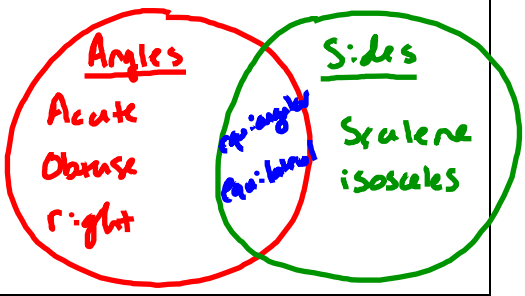
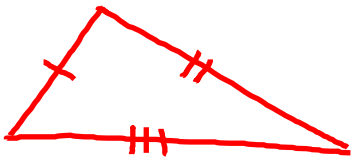
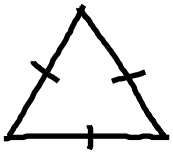
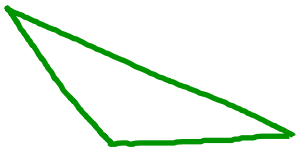
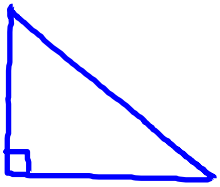
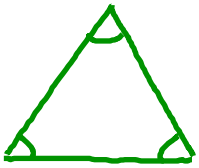
Vocabulary sheet for Lesson 3-4 (Part I)

Definition	Diagram / Notes
Definition: **Triangle-** the figure formed by three segments joining three noncollinear points.	
Definition: **Vertex-** each of the three points where two sides of the triangle meet.	
Definition: **Sides-** the three line segments that connect the points.	
Classifying Triangles: Almost all triangles have two names (like people have a first name and a last name). The first name of a triangle describes the angles the last name describes the sides.	
Definition: **Scalene Triangle-** a triangle where no sides or angles are congruent.	
Definition: **Isosceles Triangle-** a triangle where at least two sides and two angles are congruent.	
Definition: **Equilateral Triangle-** a triangle where all three sides and angles are congruent.	

Definition: **Acute Triangle-** a triangle where all three angles are acute (< 90°). 	
Definition: **Obtuse Triangle-** a triangle where one angle is obtuse (> 90°).	
Definition: **Right Triangle-** a triangle with one right angle (= 90°).	
Definition: **Equiangular Triangle-** a triangle where all angles are congruent Corollary 2: Each angle of an equilateral triangle has measure of 60°.	
Example 1: Classify the following triangle by angles and sides. m< A = 88°, m< B = 62°, m< C = 30° $\overline{AB}$ = 12 cm, $\overline{BC}$ = 20 cm, $\overline{AC}$ = 16 cm ↑ acute Scalene **Example 3:** m< A = 30°, m< B = 40°, m< C = 110° $\overline{AB}$ = 36 cm, $\overline{BC}$ = 10 cm, $\overline{AC}$ = 15 cm ↑ Obtuse Scalene	**Example 2:** m< A = 45°, m< B = 45°, m< C = 90° $\overline{AB} = \sqrt{18}$ cm, $\overline{BC}$ = 3 cm, $\overline{AC}$ = 3 ↑ Right isosceles **Example 4:** m< A = 60°, m< B = 60°, m< C = 60° $\overline{AB}$ = 12 cm, $\overline{BC}$ = 12 cm, $\overline{AC}$ = 12 cm ↑ equiangular equilateral