**Study Outline: 04 Triangles**

I. Identify:

 A. Sides:

 1.

 2.

 3.

 B. Angles:

 1.

 2.

 3.

II. Special Parts of Triangles:

 A. Medians:

 Centroid:

 B. Altitudes:

 Orthocenter:

 C. Perpendicular Bisectors:

 Circumcenter:

 D. Angle Bisectors:

 Incenter :

III. Triangle Inequality Theorem:

 A. Theorem:

 B. Purpose of theorem:

IV. Calculations:

 A. Pythagorean Theorem:

 1. Theorem:

 2. Converse:

 3. Triples:

 B. Angle Sum Theorem:

 1. Interior angles:

 2. Exterior angles:

 3. Remote interior angles:

 C. Isosceles Triangle Theorem:

 1. Theorem:

 2. Converse:

 D. Congruent Triangles:

 1. Congruency Statements:

 2. Theorems:

 a. SSS:

 b. SAS:

 c. ASA:

 d. AAS:

 e. HL:

 f. CPCTC:

 3. Proofs: