**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: