

### New Concepts

- Vertex
- Sides
- Scalene
- Isosceles
- Equilateral, Equiangular
- Acute, Obtuse
- Corollary

### Problem Set #14

*“In mathematics the art of proposing a question must be held of higher value than solving it.”*

- Georg Cantor

### New Postulates and Theorems

- Theorem 22 – The sum of the measures of the angles of a triangle is 180.
  - corollary – If two angles of one triangle are congruent to two angles of another triangle, then the third angles are congruent.
  - corollary – Each angle of an equiangular triangle has measure 60.
  - corollary – In a triangle, there can be at most one right angle or obtuse angle.
  - corollary – The acute angles of a right triangle are complementary.
- Theorem 23 – The measure of an exterior angle of a triangle equals the sum of the measures of the two remote interior angles.

### Exercises:

p.97 #9-22,25,26

### Problems:

(Your goal for these problems is not simply to solve, but rather to write an elegant solution to justify your result. It should be written well enough so that it can be shown to your peers and they can reason through your process without the need for you to add comment)

#### 14-1 6336 Triangle

A triangle has vertices at (0,0), (6,3) and (3,6). What is the area of this triangle?