Triangle Reference Sheet:

<u>Triangle</u> – closed figure formed by three line segments. Example:

<u>Side</u> – one of the line segments making up the triangle.

<u>Vertex</u> – point where two sides of the triangle meet.

<u>Interior Angle</u> – angle within the triangle.

- A triangle has three interior angles.

Exterior Angle – angle formed outside the triangle by one side and the extension of the adjacent side.

<u>Altitude (Height)</u> – line segment with one endpoint at any vertex of the triangle, extending to the line containing the opposite side, and perpendicular to that side. Examples:

 \underline{Median} – line segment with one endpoint at any vertex of the triangle, extending to the midpoint (middle) of the opposite side.

Example:

<u>Angle Bisector</u> – line segment with one endpoint at any vertex of the triangle extending to the opposite side so that it bisects (evenly divides) the vertex angle. Example: True Statements about Triangles:

- 1) The sum of the measures of the interior angles of a triangle is 180 degrees.
- 2) The longest side of a triangle is opposite the largest angle and vice versa.
- 3) The smallest angle is opposite the shortest side and vice versa.
- 4) An exterior angle of a triangle equals the sum of the measures of the two nonadjacent interior angles.
- 5) The sum of any two sides of a triangle must be greater than the third side.
- 6) Any side of a triangle is greater than the difference of the other two sides.