Geometric Properties
and Relationships

**Geometry**

**Unit 1 Line Master 7**

|  |  |
| --- | --- |
| **Angles with Parallel and Intersecting Lines*** Corresponding angles are congruent.
* Alternate angles are congruent.
* Opposite angles are congruent.
* A diagram of a diagram of opposite and opposite  Description automatically generatedCo-interior angles are supplementary.
 | **Sum of Interior Angles in a Polygon**A polygon of *n* sides can be divided into (*n* – 2) triangles.A triangle with points and lines  Description automatically generatedSo, the sum of the interior angles is (*n* – 2) × 180°. |
| **Sum of Exterior Angles in a Polygon**The sum of the exterior angles of a polygon is 360°.A diagram of a triangle and a triangle  Description automatically generated with medium confidence | **Side Lengths of a Triangle**The sum of any two sides of a triangle is always greater than the length of the third side.A triangle with letters and numbers  Description automatically generated |
| **Angles and Side Lengths in a Triangle**The relative lengths of the sides are the same as the relative measures of the angles to which they are opposite.A triangle with a point and numbers  Description automatically generated | **Perpendicular Bisector in a Right Triangle**A perpendicular bisector of a leg in a right triangle bisects the hypotenuse.A line with numbers and points  Description automatically generated with medium confidence |
| **Angle Bisector in a Triangle****A triangle with a line drawn on it  Description automatically generated** | **Median of a Triangle****A triangle with lines and points  Description automatically generated** |