|  |  |  |  |
| --- | --- | --- | --- |
| a 3-sided polygon | | a triangle with all 3 interior angles measuring < 90° | |
| a triangle that has 3 unequal sides  https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcTAtucs2_XgxR4WEY_c5TjduEb_sjhNDniqd69OTYT1oxn2zX-8 | | a triangle in which one of the angles is >90°  https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcSLxdipKAkuy1jXtjixkJqyoAVevcWNny_gpWF_gZn1DTBJ52Xn | |
| a triangle that has 2 or more sides that are equal  https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcT_woSNM9BzD7e-WuH7R26nvlYZfNipHUFO7c1EbZDochqQsEEe | | a triangle with one 90° angle | |
| a triangle with all sides equal | | a triangle with all angles equal (all 60°) | |
| Acute Triangle |  |  | Geometry  by Sharrer  Triangles  p1/4  Triangle |
| Obtuse Triangle |  |  | Scalene Triangle  (scalen -”unequal”) |
| Right  Triangle |  |  | Isosceles Triangle  (iso -”equal”  sceles - “legs”) |
| Equiangular Triangle |  |  | Equilateral Triangle  (equi - equal”) |
| the longest side of a right triangle, opposite the right angle | |  | |
| Leg2 + Leg2 = Hypotenuse2  http://www.algebra.com/calculators/geometry/pyth.jpg | |  | |
| a set of three integers that can be the lengths of the sides of a right triangle  (work in the Pythagorean theorem)  EX: 3²+4² = 5², the numbers 3,4,5 | |  | |
|  | |  | |
| Sine = |  |  | Geometry  by Sharrer  Triangles  p2/4  Hypotenuse |
| Cosine = |  |  | Pythagorean Theorem |
| Tangent = |  |  | Pythagorean Triple |
| Sides of a 30-60-90 Triangle |  |  | Sides of a 45-45-90 Triangle |
| a line segment joining a vertex to the midpoint of the opposing side | | formed when one side of a triangle is extended  d  http://img.sparknotes.com/content/testprep/bookimgs/newsat/0004/exterior.gif | |
| the perpendicular distance from the base to the opposite vertex | | For all Triangles, the sum of the shorter sides must be greater than the length of the largest side    Small + Small > Big  http://cimg1.ck12.org/datastreams/f-d%3A71a91e991953ade35ed6456f108906996b25ab6c0efaa495c0ea2ff2%2BIMAGE%2BIMAGE.1 | |
| a line segment that bisects one of the vertex angles of a triangle    (bisect – to cut into 2 equal parts) | | Short side opposite Smallest angle  Middle side opposite Middle angle  Largest side opposite Largest angle | |
| a segment, ray, line, or plane that is perpendicular to a segment at its midpoint | | a segment that connects the midpoints of two sides of a triangle; connects two midpoints of triangle; parallel to and 1/2 length of side below it | |
| Exterior Angle  of a  Triangle |  |  | Geometry  by Sharrer  Triangles  p3/4  Median  of a  Triangle |
| Given 3 lengths,  determine if a triangle is possible |  |  | Height  aka  Altitude  of a  Triangle |
| Given 3 angles  of a  Triangle,  determine the short, middle,  and long sides |  |  | Angle Bisector  of a  Triangle |
| Midsegment  of a  Triangle |  |  | Perpendicular Bisector  of a  Triangle |
| ASA  AAS  SSA  AAA  SSS  HL  (no ASS) | | =180° | |
| a segment that connects the midpoints of two sides of a triangle; connects two midpoints of triangle; parallel to and 1/2 length of side below it | | Triangles that have the same angles, but not necessarily the same side lengths    The sides must be proportional  SSS, SAS, AA | |
| -this can be any side of a triangle.  -usually the side of a triangle drawn on the bottom | | Right Triangle- the two sides that form a right triangle  Isosceles Triangle- the two equal sides | |
| the amount of space inside the boundary of a triangle  = ½ base\*height | | the total distance around the outside of a triangle    =Side1 + Side2 + Side3 | |
| Sum of the angles of a  Triangle  = |  |  | Geometry  by Sharrer  Triangles  p4/4  Congruent Triangles  () |
| Similar  Triangles  (~) |  |  | Midsegment  of a  Triangle |
| Legs  of a  Triangle |  |  | Base  of a  Triangle |
| Perimeter of a  Triangle  PTriangle = ? |  |  | Area  of a  Triangle  ATriangle = ? |