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| --- | --- |
| a 3-sided polygon  | a triangle with all 3 interior angles measuring < 90°  |
| a triangle that has 3 unequal sideshttps://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 equalhttps://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 |  |  | Geometryby SharrerTrianglesp1/4Triangle |
| Obtuse Triangle |  |  | Scalene Triangle(scalen -”unequal”) |
| RightTriangle |  |  | 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 =  |  |  | Geometryby SharrerTrianglesp2/4Hypotenuse  |
| 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 extendedd 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 sideSmall + Small > Bighttp://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 angleMiddle side opposite Middle angleLargest 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 Angleof a Triangle  |  |  | Geometryby SharrerTrianglesp3/4Medianof aTriangle  |
| Given 3 lengths, determine if a triangle is possible |  |  | HeightakaAltitude of a Triangle  |
| Given 3 anglesof aTriangle,determine the short, middle, and long sides |  |  | Angle Bisectorof aTriangle |
| Midsegmentof aTriangle |  |  | Perpendicular Bisectorof aTriangle |
| ASAAASSSAAAASSSHL(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 lengthsThe sides must be proportionalSSS, 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 triangleIsosceles 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= |  |  | Geometryby SharrerTrianglesp4/4Congruent Triangles() |
| SimilarTriangles(~) |  |  | Midsegmentof aTriangle |
| Legs of a Triangle  |  |  | Base of a Triangle  |
| Perimeter of a Triangle PTriangle = ? |  |  | Area of a Triangle ATriangle = ? |