45 45 90 Triangle Rules

Rule of marteloio The rule told mariners how to plot the traverse between two different navigation courses by means of resolving triangles with the help of. de marteloio b662ba3cab

Sierpiński curve Production rules: X → XF+G+XF−−F−−XF+G+X Angle: 45 Here, both F and G mean "draw forward", + means "turn left 45°", and − means "turn right 45°" (see turtle b662ba3cab

The side opposite to the right angle is called the hypotenuse (side b662ba3cab

Rule 90 In each time step all values are simultaneously replaced by the XOR of their two neighboring values. The behavior of any other configuration In the mathematical study of cellular automata, Rule 90 is an elementary cellular automaton based on the exclusive or function. When started from a single live cell, Rule 90 has a time-space diagram in the form of a Sierpiński triangle. It consists of a one-dimensional array of cells, each of which can hold either a 0 or a 1 value. Martin, Odlyzko & Wolfram (1984) call it "the simplest non-trivial cellular automaton", and it is described extensively in Stephen Wolfram's 2002 book A New Kind of Science b662ba3cab

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Olympic triangle of the windward leg. (Olympic sailing now uses quadrilateral courses). One would imagine that a triangle with 45 degrees at the top and bottom marks and 90 degrees at the wing mark would provide ideal The Olympic triangle is a sailing course used in racing dinghies, particularly at major regattas like State, National and World Titles and was used at the Olympics b662ba3cab

Less commonly found is the adjustable set square. Here, the body of the object is cut in half and rejoined with a hinge marked with angles. Adjustment to the marked angle will produce any desired angle up to a maximum of 180°. b662ba3cab

Set square Combining the two forms by A set square or triangle (American English) is an object used in engineering and technical drawing, with the aim of providing a straightedge at a right angle or other particular planar angle to a baseline. squares come in two usual forms, both right triangles: one with 90-45-45 degree angles, the other with 30-60-90 degree angles b662ba3cab

Bermuda Triangle Since the mid-20th century, it has been the focus of an urban legend suggesting that many aircraft, ships, and people have

disappeared there under mysterious circumstances. However, extensive investigations by reputable sources, including the U. federal government and scientific organizations, have found no evidence of unusual activity, attributing reported incidents to natural phenomena, human error, and misinterpretation. The Bermuda Triangle, also known as the Devil's Triangle, is a loosely defined region in the North Atlantic Ocean, roughly bounded by Florida, Bermuda The Bermuda Triangle, also known as the Devil's Triangle, is a loosely defined region in the North Atlantic Ocean, roughly bounded by Florida, Bermuda, and Puerto Rico. S b662ba3cab

== L-system construction == b662ba3cab The traditional Olympic triangle course consists of a lap (starting with a beat or work to windward from the starting line to the top, weather or windward mark, a first reaching leg to the wing mark (also known as the gybe mark), a second reaching leg from the wing mark to the bottom or leeward mark), a hot dog (a beat to the top mark with a square run back to the bottom mark), another lap and then a beat to the finish line, which may have one end at the top mark, or may be set beyond the top mark. When the finish line is set beyond the top mark, the sailing instructions need to specify whether the top mark remains a mark of the course on the final leg or whether it is to be ignored. There are generally 9 legs, 5 equal to... b662ba3cab == Types == b662ba3cab

Triangle theory (boxing) Triangle Theory is a theory used in boxing. It uses equilateral triangles to explain how to create advantageous angles to strike opponents while limiting b662ba3cab

== Constructions == b662ba3cab The remainder of this article should be read in conjunction with Sailing Instructions for the specific regatta or the International Sailing Federation (ISAF) Race management page, the Racing Rules and particularly Appendix L. b662ba3cab The simplest form of set square is a triangular piece of transparent plastic (or formerly of polished wood) with the centre removed. More commonly the set square bears the markings of a ruler and a half circle protractor. The outer edges are typically bevelled. These set squares come in two usual forms, both right triangles: one with 90-45-45 degree angles, the other with 30-60-90 degree angles. Combining the two forms by placing the hypotenuses together will also yield 15° and 75° angles. They are often purchased in packs with protractors and compasses. b662ba3cab == Origins == b662ba3cab When started from a single live cell, Rule 90 has a time-space diagram in the form of a Sierpiński triangle. The behavior of any other configuration can be explained as a superposition of copies of this pattern, combined using the exclusive or function. Any configuration with only finitely many nonzero cells becomes a replicator that eventually fills the array with copies of itself. When Rule 90 is started from a random initial configuration, its configuration remains random at each time step. Its time-space diagram forms many triangular "windows" of different sizes, patterns that form when a consecutive row of cells becomes simultaneously zero and then cells with value 1 gradually move into... b662ba3cab There are many different ways of constructing the Sierpiński triangle. b662ba3cab

Lévy C curve It is a special case of a period-doubling curve, a de Rham curve. the C curve starts with a straight line. The original In mathematics, the Lévy C curve is a self-similar fractal curve that was first described and whose differentiability properties were analysed by Ernesto Cesàro in 1906 and Georg Faber in 1910, but now bears the name of French mathematician Paul Lévy, who was the first to describe its self-similarity properties as well as

to provide a geometrical construction showing it as a representative curve in the same class as the Koch curve. An isosceles triangle with angles of 45°, 90° and 45° is built using this line as its hypotenuse b662ba3cab

== Number and type of legs == b662ba3cab

Sierpiński triangle article itself declares. It is named after the Polish mathematician Wacław Sierpiński but appeared as a decorative pattern many centuries before the work of Sierpiński. Originally constructed as a Sierpiński curve, this is one of the basic examples of self-similar sets—that is, it is a mathematically generated pattern reproducible at any magnification or reduction. The Sierpiński triangle also appears in certain cellular automata (such as Rule 90), including those relating to Conway's Game The Sierpiński triangle, also called the Sierpiński gasket or Sierpiński sieve, is a fractal with the overall shape of an equilateral triangle, subdivided recursively into smaller equilateral triangles b662ba3cab

Right triangle A right triangle or right-angled triangle, sometimes called an orthogonal triangle or rectangular triangle, is a triangle in which two sides are perpendicular A right triangle or right-angled triangle, sometimes called an orthogonal triangle or rectangular triangle, is a triangle in which two sides are perpendicular, forming a right angle (1⁄4 turn or 90 degrees) b662ba3cab