- Personal info:
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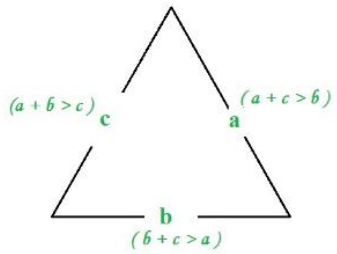
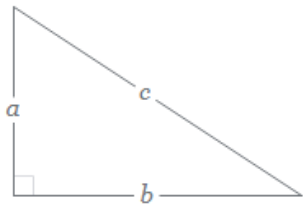
  - **Department:** Computer Science
  - **Section:** 3

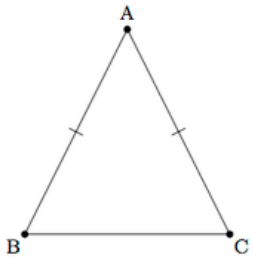
- Rules:
  - A triangle is valid if and only if the sum of each two sides is greater than the third side, i.e.:
    - $a + b > c$
    - $a + c > b$
    - $b + c > a$



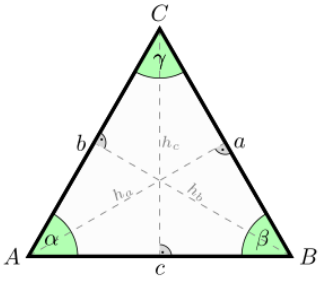
  - According to the Pythagorean theorem, a triangle is orthogonal if and only if:
    - $a^2 + b^2 = c^2$



  - A triangle is said to be isosceles triangle if and only if it has two sides of equal length, i.e.:
    - $|AB|=|AC|$



  - A triangle is said to be equilateral triangle if and only if all of its three sides are of equal length, i.e.:
    - $|AB|=|AC| = |BC|$



- Code:
  - Where:
    - t denotes valid triangle
    - ot denotes orthogonal triangle
    - it denotes isosceles triangle
    - et denotes equilateral triangle
  - Github repository
  - Screenshots: