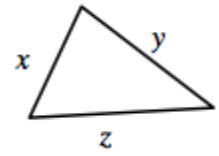
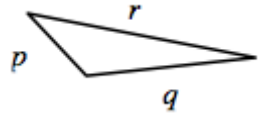


Acute triangle: The sum of the squares of the lengths of the two shorter sides is greater than the square of the length of the longest side.



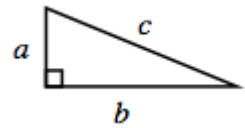
$$x^2 + y^2 > z^2$$

Obtuse triangle: The sum of the squares of the lengths of the two shorter sides is less than the square of the length of the longest side.



$$p^2 + q^2 < r^2$$

Right triangle: The sum of the squares of the lengths of the two shorter sides is equal to the square of the length of the longest side.



$$a^2 + b^2 = c^2$$