

IS IT A TRIANGLE?

With your partner, use the provided GeoGebra activity to complete the table below. If a set of sides does not make a triangle, write “not a triangle” in the third column.

GeoGebra link: <https://www.geogebra.org/m/tgwg6tnj>.

Number Sets	Is It a Triangle? (Yes/No)	What Type of Triangle? (Acute, Obtuse, Right)	$a+b$	$>$ $<$ $=$	c
3, 4, 5					
1, 2, 3					
6, 5, 10					
12, 16, 18					
7, 3, 12					

How do we know if three line segments make a triangle?

What algebra can help us calculate this?

Notation

How do we know what type of triangle a set of segments creates?

What algebra can help us calculate this?

Type of Triangle	Notation
Right	
Acute	
Obtuse	