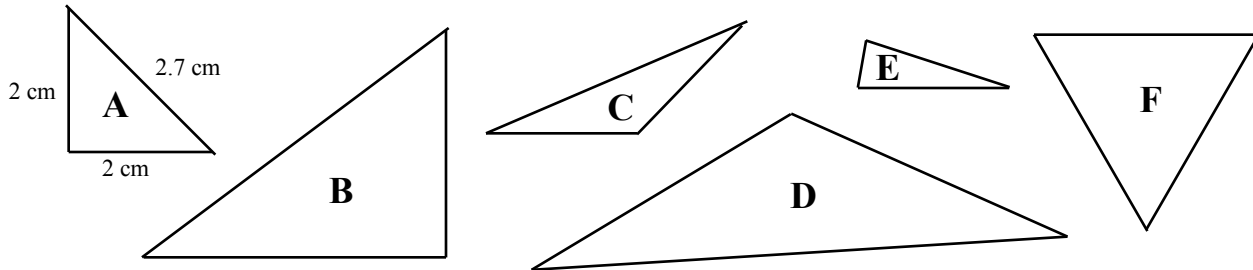# MathFLIX CHALLENGE
To be a triangle or not to be a triangle?

According to the **Triangle Inequality Theorem**, the sum of the lengths of any two sides of a triangle is greater than the length of the third side: **side 1 + side 2 > side 3**

Measure the sides of each triangle and complete the table to test the theorem.

Shape ID	Length of Side 1	Length of Side 2	Side 1 + Side 2	Measure of Side 3	Type of triangle (side)	Type of triangle (angle)
A	2 cm	2 cm	4 cm	2.7 cm	isosceles	90º
B						
C						
D						
E						
F						

Use the dimensions below to see if shapes G through L can be triangles.

Sketch Area

Shape ID	Length of Side 1	Length of Side 2	Length of Side 3	Triangle? Yes/No
G	1cm	1cm	1cm	
H	1cm	1cm	2cm	
I	1cm	3cm	1cm	
J	4cm	1cm	1cm	
K	4cm	5cm	1cm	
L	4cm	3cm	2cm	