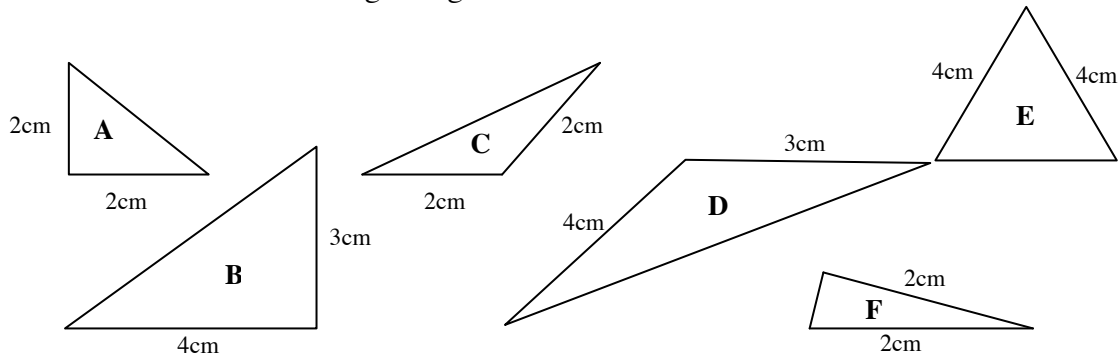


MathFLIX CHALLENGE

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

Use the following triangles and the data table to test the theorem.

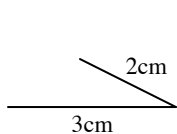


ID	Length of side 1	Length of side 2	Side 1 + side 2	Measure of side 3	Type of triangle (side)	Type of triangle (angle)
A						
B						
C						
D						
E						
F						

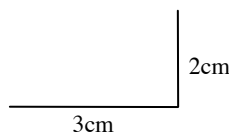
Use the **Triangle Inequality Theorem** to determine if shapes G through L can be triangles.

Shape ID	Length of side 1	Length of side 2	Length of side 3	Is it a Triangle? Yes or No
G	1	1	1	
H	1	1	2	
I	1	3	1	
J	4	1	1	
K	4	5	1	
L	4	3	2	

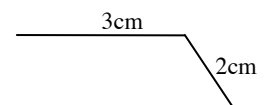
Make 3 different triangles. Complete the inequality expression for each to show the **Triangle Inequality Theorem**.



$$3\text{cm} + 2\text{cm} >$$



$$3\text{cm} + 2\text{cm} >$$



$$3\text{cm} + 2\text{cm} >$$