

POW #4 - Geometry

The Folding Ruler [Problem #2787]

A folding ruler is a wooden ruler made of straight sections and hinged that you can fold or unfold depending on how much ruler you "need". You can also make shapes out of them like the rectangle below.



The one that I have is 6 feet long and is split into 12 sections of 6 inches each. (Each section is actually about 8 inches long, but there is some overlap at the hinges.)

1. Describe all of the possible triangles I could make using the full length of the ruler.
2. Say whether each triangle is scalene, isosceles, or equilateral, and explain whether each triangle is acute, right, or obtuse.

Explain your answer in a paragraph in order to receive credit.