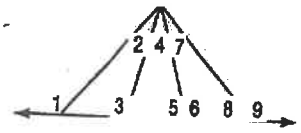
5.3

9) **Use the Exterior Angle Inequality Theorem to list all of the angles that satisfy the stated condition.**

measures less than $m\angle 1$



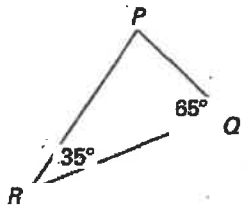
measures less than $m\angle 9$

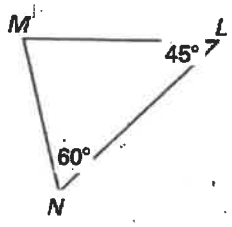
measures greater than $m\angle 5$

measures greater than $m\angle 8$

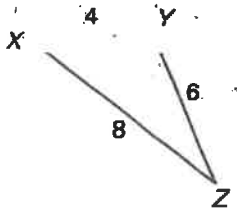
10)

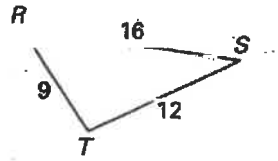
Name the shortest and longest sides of the triangle.





11) **Name the smallest and largest angles of the triangle.**





5.5

12) **Is it possible to form a triangle with the given side lengths? If not, explain why not.**

1. 2 ft, 3 ft, 4 ft

2. 5 m, 7 m, 9 m

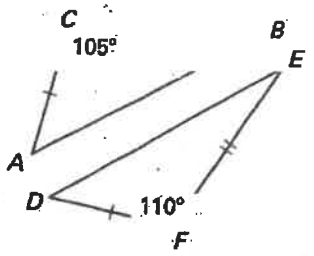
13) **Find the range for the measure of the third side of a triangle given the measures of two sides.**

9. 5 ft, 9 ft

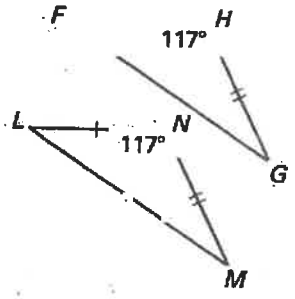
5.6

14) **Complete with <, >, or**

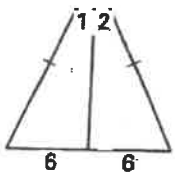
AB ? DE



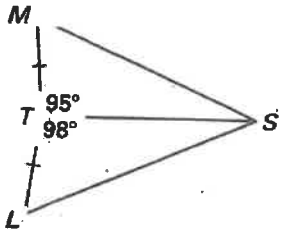
FG ? LM



$m\angle 1$? $m\angle 2$



MS ? LS



15) **Use an inequality to describe a restriction on the value of x as determined by the Hinge Theorem or its converse.**