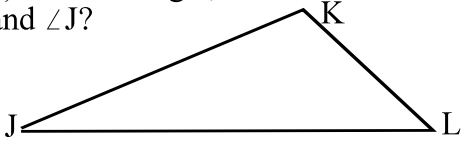


Triangles: Angle- Side Relationships 3  
Geometry

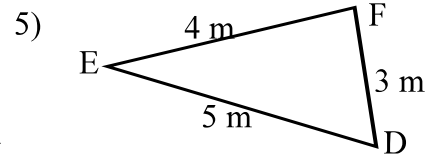
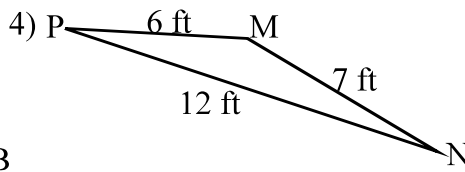
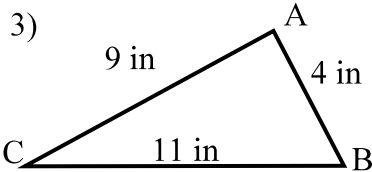
1) In the triangle,  $JL > LK$ . What is true of  $\angle K$  and  $\angle J$ ?



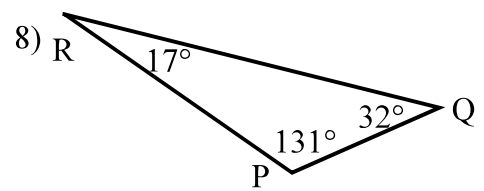
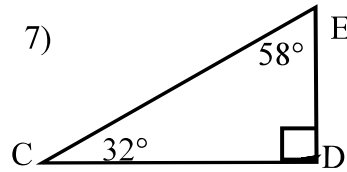
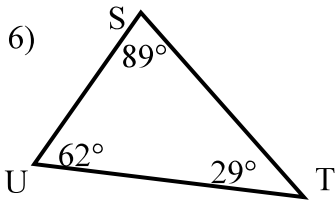
2) In the triangle,  $XZ > YZ$ . What is true of  $\angle Y$  and  $\angle X$ ?



List the angles from smallest to greatest.



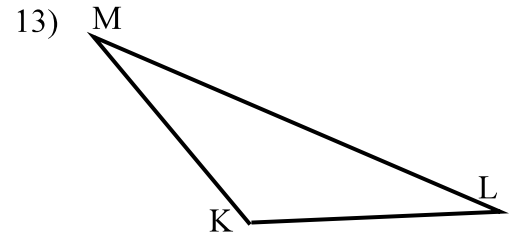
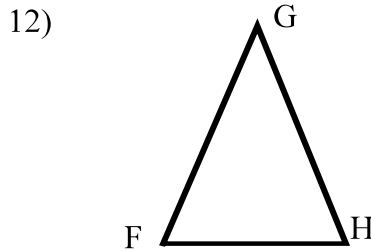
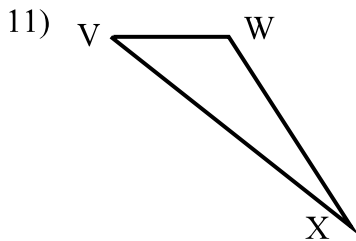
List the sides from longest to shortest.



9) In a triangle  $\angle M$  is larger than  $\angle P$ , and  $\angle P$  is larger than  $\angle Q$ . List the sides from longest to shortest.

10) In a triangle  $AB > BC > CA$ . List the angles from biggest to smallest.

List three inequalities for each triangle.



Can these numbers be the lengths of the sides of a triangle?

14) 6, 4, 9

15) 2, 3, 2

16) 20, 2, 17

17) 6, 10, 4

18) 7, 7, 13

19) 9, 2, 4

20) 24, 8, 18

21) 19, 15, 2

22) 15, 20, 5

23) 11, 13, 15

In the following problems, the lengths of two sides of a triangle are given. What can you say about the possible lengths for the third side?

24) 10, 4

25) 12, 3

26) 1, 6

27) 13, 13