

Math 2 Unit 4 Worksheet 6
Inequalities in One and Two Triangles

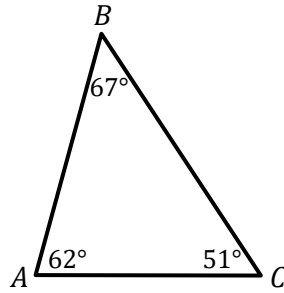
Name: _____
 Date: _____ Per: _____

[1-6] List the sides and the angles in order from smallest to largest.

1.

Sides: _____

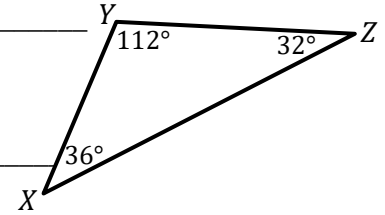
Angles: _____



2.

Sides: _____

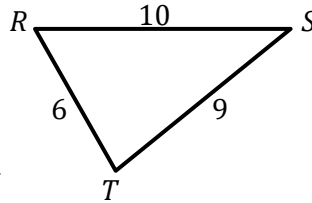
Angles: _____



3.

Sides: _____

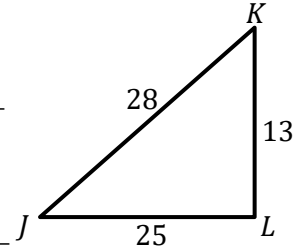
Angles: _____



4.

Sides: _____

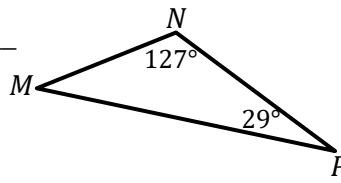
Angles: _____



5.

Sides: _____

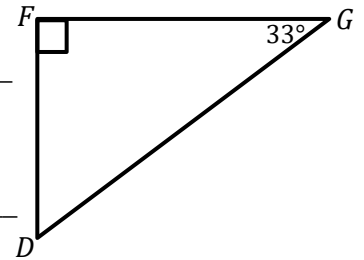
Angles: _____



6.

Sides: _____

Angles: _____



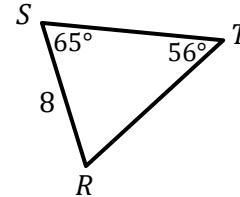
7. Multiple Choice: In $\triangle RST$, Which is a possible side length for ST ?

(A) 7

(B) 8

(C) 9

(D) Cannot be determined



[8-11] Is it possible to construct a triangle with the given side lengths? If not, explain why not.

8. 6, 7, 11

9. 3, 6, 9

10. 28, 34, 39

11. 35, 120, 125

12. Multiple Choice: Which group of side lengths can be used to construct a triangle?

- a) 3yd., 4ft., 5yd. b) 3 yd., 5 ft., 8 ft. c) 11 in., 16 in., 27 in. d) 2ft., 11 in., 12 in.

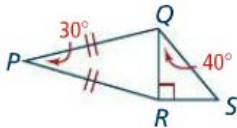
[13-18] Describe the possible lengths of the third side of the triangle given the lengths of the other 2 sides.

13. 5 inches, 12 inches 14. 3 meters, 4 meters 15. 12 feet, 18 feet

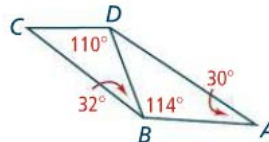
16. 10 yards, 23 yards 17. 2 feet, 40 inches 18. 25 meters, 25 meters

[19-21] Determine which segment is the **shortest** in each diagram.

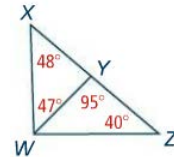
19.



20.



21.



22. Describe your process for determining which segment is the shortest when you have two triangles with a shared side. _____
