

Assignment

State if the three numbers can be the measures of the sides of a triangle.

1) 7, 7, 9

Yes

2) 19, 12, 7

No

3) 10, 8, 6

Yes

4) 4, 6, 12

No

5) 9, 12, 3

No

6) 3, 7, 11

No

Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

7) 7, 7

$$0 < x < 14$$

8) 8, 6

$$2 < x < 14$$

9) 9, 7

$$2 < x < 16$$

10) 9, 11

$$2 < x < 20$$

11) 9, 12

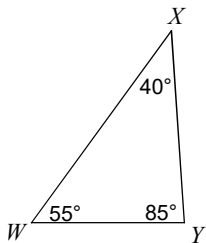
$$3 < x < 21$$

12) 12, 7

$$5 < x < 19$$

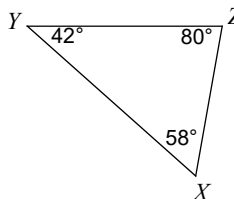
Order the sides of each triangle from shortest to longest.

13)



$\overline{WY}, \overline{XY}, \overline{WX}$

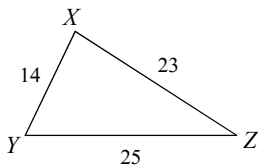
14)



$\overline{XZ}, \overline{YZ}, \overline{XY}$

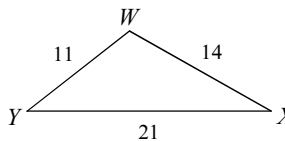
Order the angles in each triangle from smallest to largest.

15)



$\angle Z, \angle Y, \angle X$

16)



$\angle X, \angle Y, \angle W$