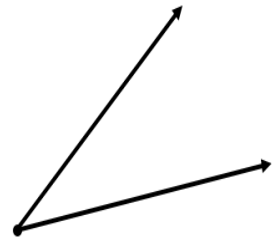


Directions: Complete each construction using a compass and a straightedge.

1) Copy the line segment.



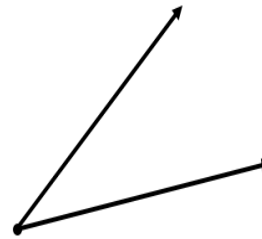
2) Copy the angle.



3) Bisect the line segment.

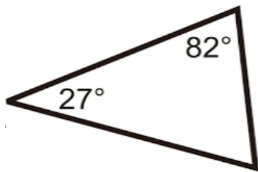


4) Bisect the angle.

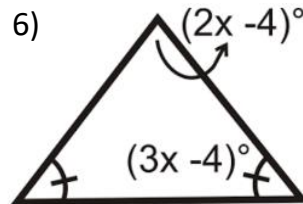


Directions: Classify the triangle by its angles and sides.

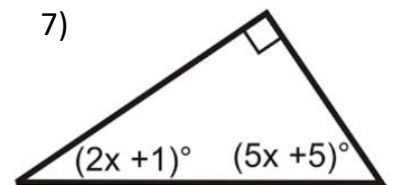
5)



6)



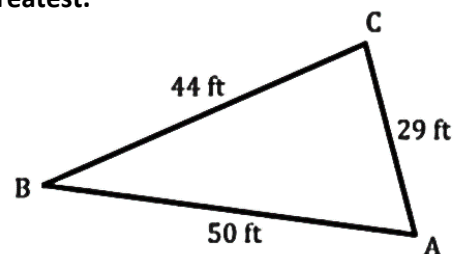
7)



Directions: Write the triangle angles and sides in order from least to greatest.

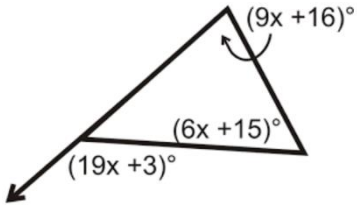
- 8) $m\angle D = (x - 15)^\circ$
 $m\angle E = 90^\circ$
 $m\angle F = (2x - 165)^\circ$

9)

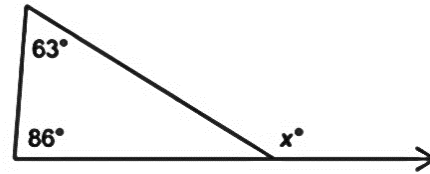


Directions: Solve for x .

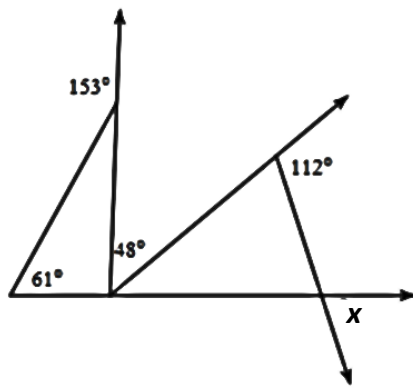
10)



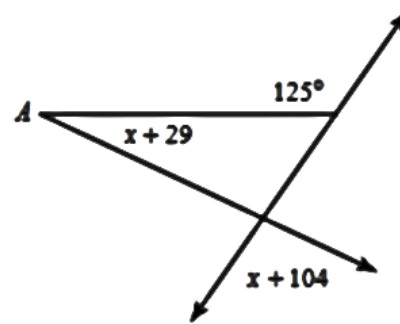
11)



12)



13)



Directions: Determine if the following sides can make a triangle.

14) 5, 6, 7

15) 1, 1, 2

16) 21, 21, 21

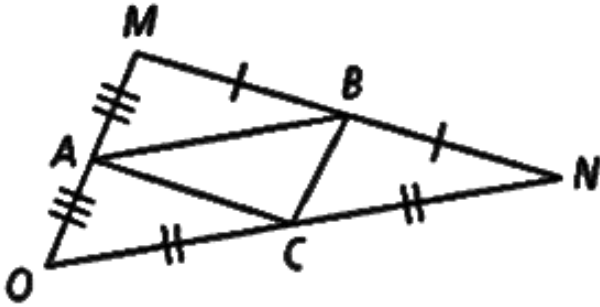
Directions: Determine the range of values for the third side of a triangle if the following lengths are two sides.

17) 7, 12

18) 12, 14

19) 5, 16

Directions: Use the figure to solve each problem.



20) $\overline{MN} \parallel ?$

21) What midsegment is parallel to \overline{MO} ?

22) If $AB = 17.5$, what is NO ?
the value of x ?

23) If $MB = 2x - 5$ and $BN = 19$, what is

24) If $AB = 3x - 1$ and $ON = 34$, what is the value of x ?

25) If $m\angle AOC = 37^\circ$, what is $m\angle BCN$?

26) If $m\angle BCN = 48^\circ$, what is $m\angle CBA$?

27) If $MO = 32$, $MN = 45$, and $ON = 81$,
what is the perimeter of $\triangle ABC$?