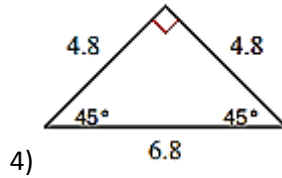
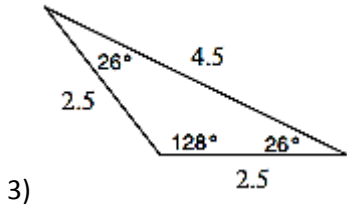
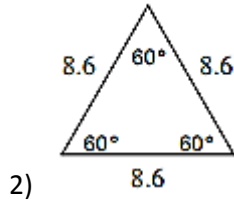
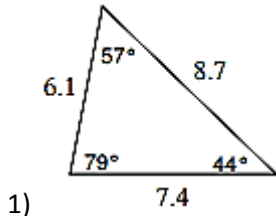
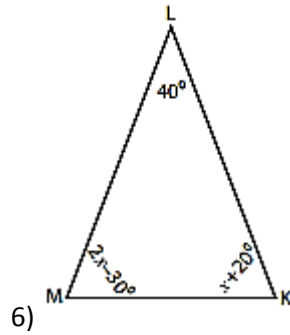
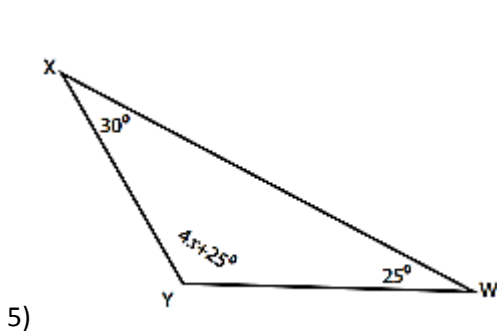


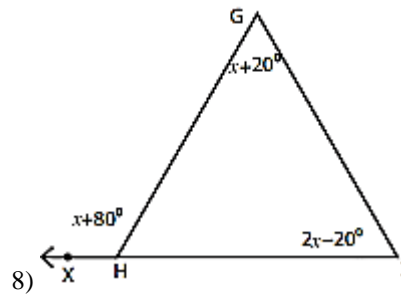
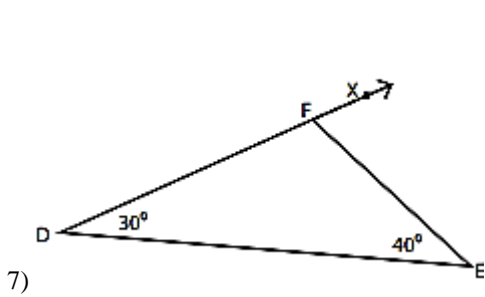
Classify each triangle based on its angles and sides



Find the value of x and the measure of the missing angle

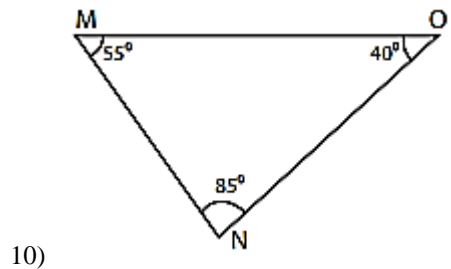
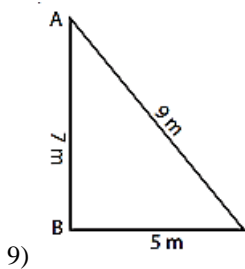


Find the measure of the exterior angle

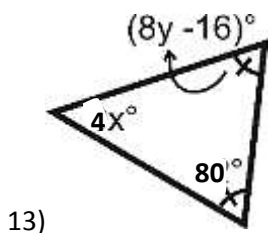
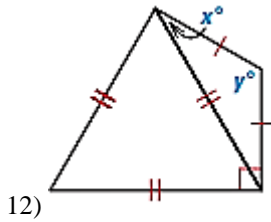
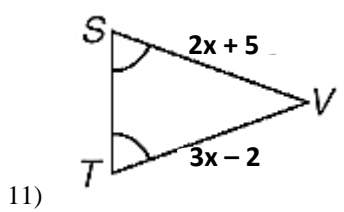


| |
|-----------------------|
| 1) _____ |
| _____ |
| 2) _____ |
| _____ |
| 3) _____ |
| _____ |
| 4) _____ |
| _____ |
| 5) $x =$ _____ |
| angle measure = _____ |
| 6) $x =$ _____ |
| angle measure = _____ |
| 7) _____ |
| 8) _____ |

In #9, arrange the angles from smallest to greatest.
 In #10, arrange the sides from smallest to greatest.



Find the value of the variables



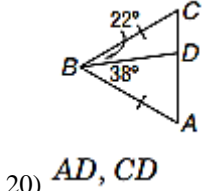
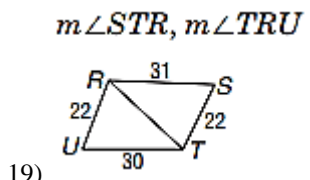
Indicate whether the following measures could form a triangle and why or why not. Show your work.

- 14) 3, 5, 9 15) 8, 7, 15 16) 2, 5, 6

Write the range of possible values for the third side of the triangle given the following two side lengths

- 17) 4 and 6 18) 12 and 12

Indicate what the relationship between the following pairs of sides or angles is (>, < or =)



Extra credit: $\triangle ABC$ has vertices $A(0, 5)$, $B(0, -5)$, and $C(-3, 3)$. Find the measures of its sides and classify the triangle by its sides.

9) smallest \angle : _____
 medium \angle : _____
 greatest \angle : _____

10) smallest side: _____
 medium side: _____
 greatest side: _____

11) $x =$ _____

12) $x =$ _____
 $y =$ _____

13) $x =$ _____
 $y =$ _____

14) Yes No
 because _____

15) Yes No
 because _____

16) Yes No
 because _____

17) _____

18) _____

19) $m\angle STR$ _____ $m\angle TRU$

20) AD _____ CD

EC) $AB =$ _____ $BC =$ _____
 $AC =$ _____

Type: _____