Geometry CC – Unit 1
EXAM 1 REVIEW FOR QUARTERLY!

Name: _____
Date: _____

Give a quick definition of each of the following terms/concepts:

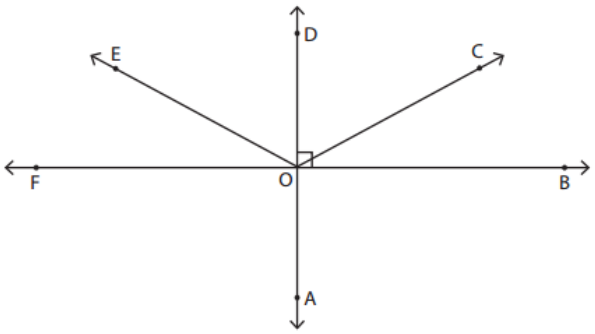
- Complementary -
- Supplementary -
- Alternate Interior Angles -
- Alternate Exterior Angles -
- Corresponding Angles -
- Same-side Interior Angles -
- Same-side Exterior Angles –
- Vertical Angles -
- Parallel Lines -
- Transversal -
- Auxiliary Lines -
- Acute Triangle -
- Obtuse Triangle -
- Right Triangle -
- Scalene Triangle -
- Isosceles Triangle -
- Exterior Angle Theorem -
- Isosceles Triangle Theorem -
- Angle-Side Relationships -
- Triangle Inequality Theorem -

1. Identify the type of each angle (acute, right, obtuse, straight)

a) ∡AOB=_____ b) ∡COF=_____

c) ∡FOE=_____ d) ∡AOC=_____

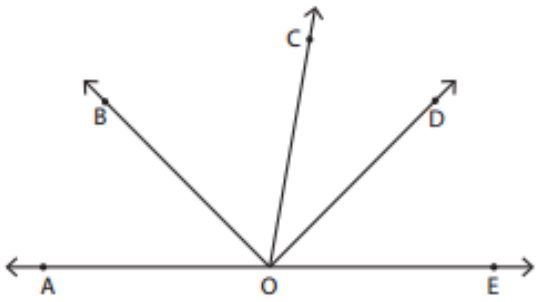
e) ∡COD=_____ f) ∡BOF=_____



2. What is the complement of a 70 degree angle?_____

3. What is the supplement of a 10 degree angle?_____

4.

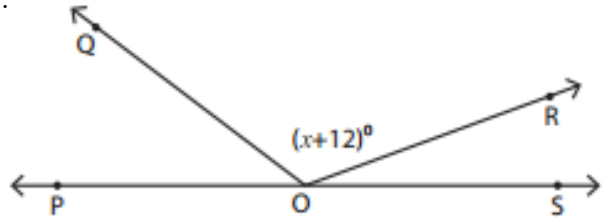


$\angle DOE = 45^\circ$

$\angle AOC = 100^\circ$

$\angle COD =$ _____

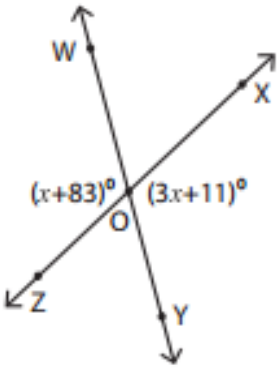
5.



$\angle POQ = 37^\circ$ $\quad x =$ _____

$\angle ROS = 20^\circ$ $\quad \angle QOR =$ _____

6.

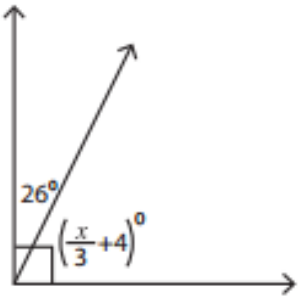


$x =$ _____

$\angle XOY =$ _____

$\angle ZOY =$ _____

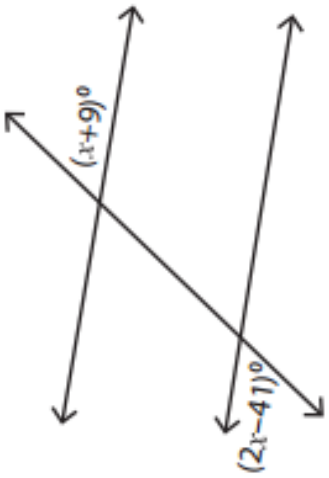
7.



$x =$ _____

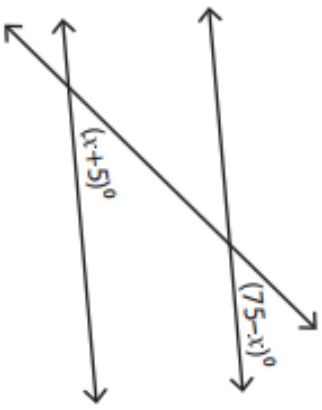
For questions 8-9, two parallel lines are cut by a transversal. What is the value of x?

8.



$x =$ _____

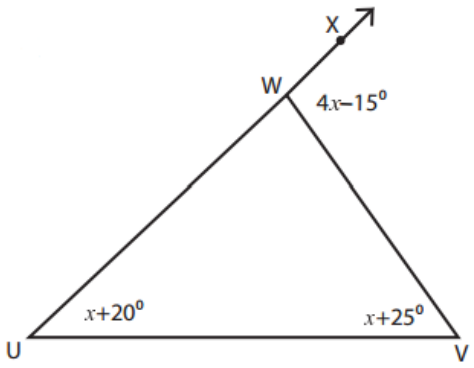
9.



$x =$ _____

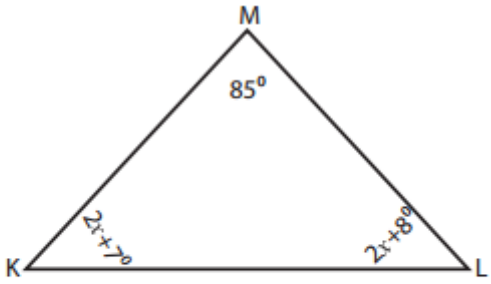
Find the missing values in each triangle:

10.



$x =$ _____ ; $\angle VWX =$ _____

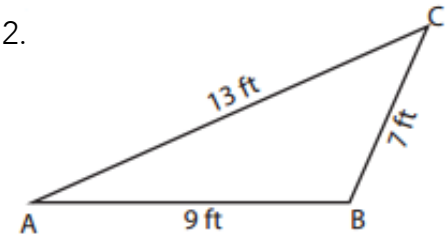
11.



$x =$ _____

$\angle K =$ _____ ; $\angle L =$ _____

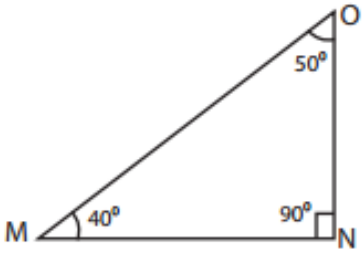
12.



Largest angle = _____

Smallest angle = _____

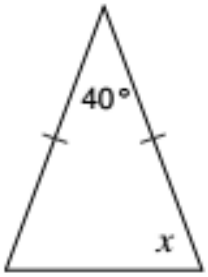
13.



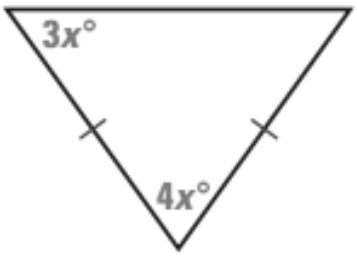
Longest side = _____

Shortest side = _____

14. Find the value of x:



15. Find the value of x:



16. Identify whether the triangle is possible or not possible given the side measures:

a) {2, 6, 8} _____ b) {2, 4, 6}_____

c) {3, 7, 11}_____ d) {8, 8, 8}_____

17. In ΔABC, m∠A = 3x + 1, m∠B = 4x − 17, and m∠C = 5x − 20. Which type of triangle is ABC?

1) right 2) scalene 3) isosceles 4) equilateral

18. In ΔABC, m∠A = x, m∠B = 2x + 2, and m∠C = 3x + 4. Which type of triangle is ABC?

1) right 2) scalene 3) isosceles 4) equilateral

19. In right triangle ABC, m∠C = 3y − 10, m∠B = y + 40, and m∠A = 90. What type of right triangle is triangle ABC?

1) scalene 2) isosceles 3) equilateral 4) obtuse

20. True or False: If I have any questions about the content in Unit 1, I will be sure to ask Mr. Valentino before the Quarterly Exam.