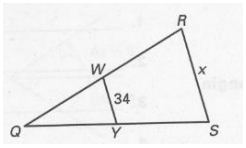
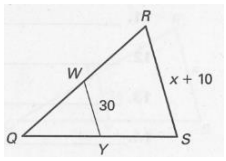
Geometry- Mrs. Tilus
Unit 5 Review

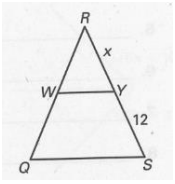
Name: _____

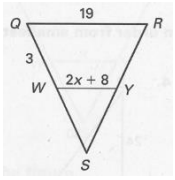
In the diagrams below, W is the midpoint of $\overline{QR}$ and Y is the midpoint of $\overline{QS}$. Find the value of x

1. $\overline{WY}$ is called a _____ of $\triangle QRS$.

2. 

3. 

4. 

5. 

In $\triangle JKL, \overline{JR} \cong \overline{RK}, \overline{KS} \cong \overline{SL}$ and $\overline{JT} \cong \overline{TL}$.

6. $\overline{JL} \parallel$ _____

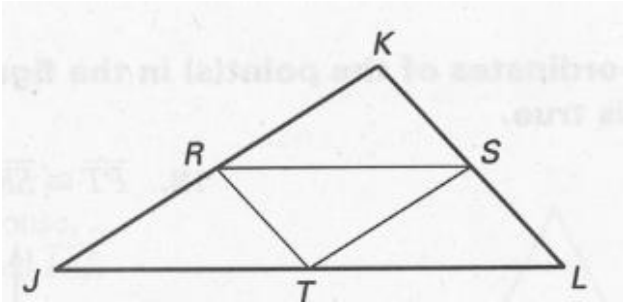
7. $\overline{ST} \parallel$ _____

8. $\overline{RT} \parallel$ _____

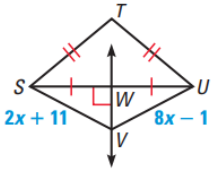
9. $\overline{KR} \cong$_____$\cong$_____

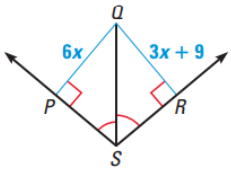
10. $\overline{KS} \cong$_____$\cong$_____

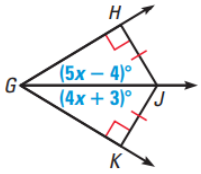
11. $\overline{RS} \cong$_____$\cong$_____



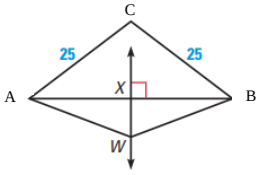
Find the value of x. Explain your reasoning,

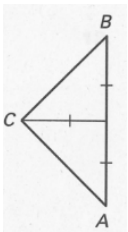
12. 

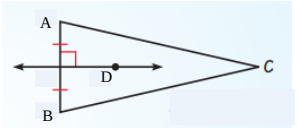
13. 

14. 

Tell whether the information in the diagram allows you to conclude that C is on the perpendicular bisector of $\overline{AB}$.

15. 

16. 

17. 

18. Fill in the blanks

The three **medians** of a triangles meet at the _____

The three **perpendicular bisectors** of a triangles meet at the _____

The three **angle bisectors** of a triangles meet at the _____

The three **altitudes** of a triangles meet at the _____

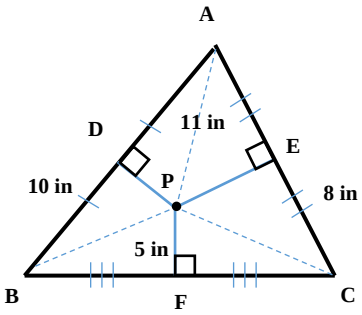
The **incenter** is the point of concurrency of _____

The **orthocenter** is the point of concurrency of _____

The **circumcenter** is the point of concurrency of _____

The **centroid** is the point of concurrency of _____

Use the diagram below to answer questions 19-24



19. $\overline{DP}$, $\overline{EP}$, $\overline{FP}$ are called _____

20. What is point P called? _____

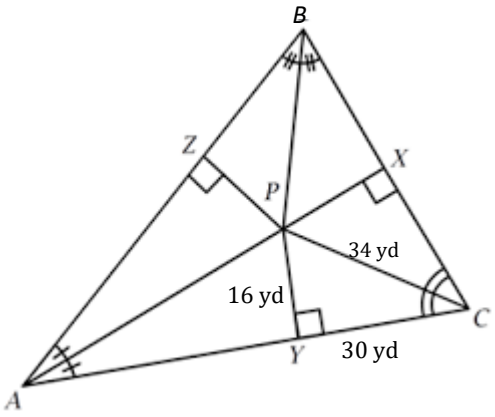
21. $CP =$

22. $AD =$

23. $AC =$

24. $BP =$

Use the figure below to answer questions 25-27

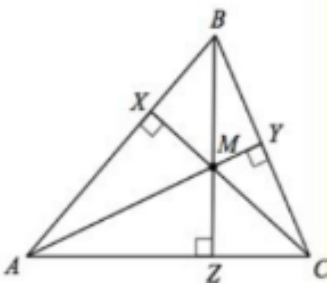


25. $\overline{AP}$, $\overline{BP}$, $\overline{CP}$, are called_____

26. What is point P called? _____

27. $PX=$

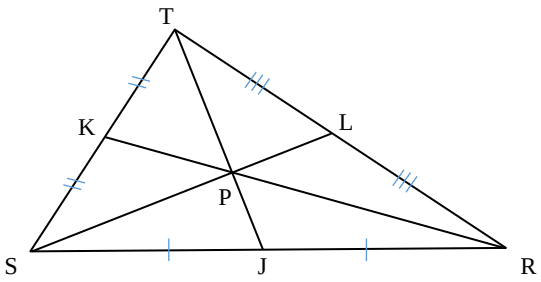
Use the figure below to answer 28 and 29.



28. $\overline{BZ}$, $\overline{AY}$, $\overline{CX}$, are called_____

29. What is point M called? _____

In the diagram below, $LS = 36\ cm$, $TP = 20\ cm$, $KP = 15\ cm$ and $JR = 25\ cm$.



30. $\overline{SL}, \overline{TJ}, \overline{RK}$ are called _____

31. What is Point P called? _____

32. $PL =$

33. $PS =$

34. $TJ =$

35. $PJ =$

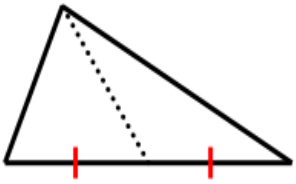
36. $JS =$

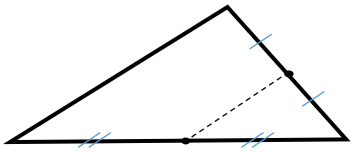
37. $RS =$

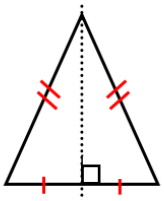
38. $PR =$

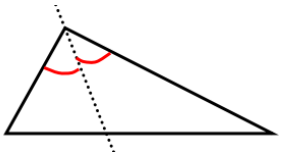
39. $KR =$

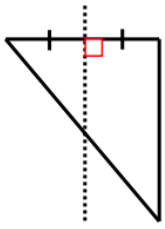
Given the following pictures and markings identify if the dotted line is a(n) Midsegment, Angle Bisector,Perpendicular Bisector, Altitude or Median **List All the Apply!**

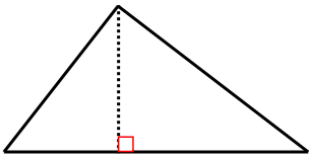
40. 

41. 

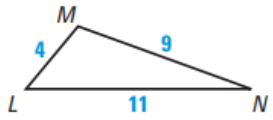
42. 

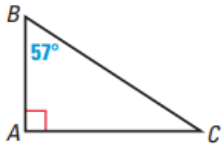
43. 

44. 

45. 

List the sides **and** the angles in order from smallest to largest.

46. 

47. 

Is it possible to construct a triangle with the given side lengths? If not, explain why.

48. 46, 14, 60

49. 4, 7, 13

50. 8, 15, 9

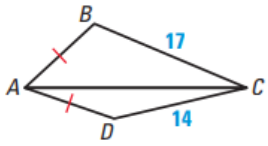
Describe the possible lengths of the third side of the triangle given the lengths of the other two sides.

51. 5 inches, 6 inches

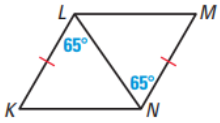
52. 14 feet, 21 feet

53. 10 feet, 5 yards

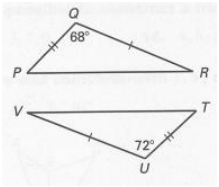
Complete with $<, >$ *or* $=$. Justify your answer.

54. 

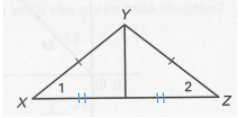
$m\angle BAC$ _____ $m\angle DAC$

55 

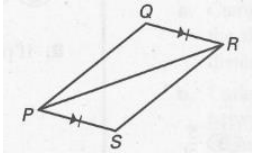
LM _____ KN

56. 

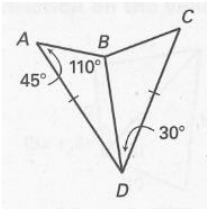
PR _____ VT

57. 

$m\angle 1$ _____ $m\angle 2$

58. 

PQ _____ SR

59. 

AB _____ BC