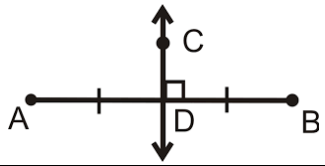
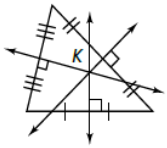
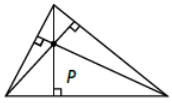
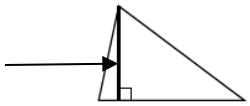
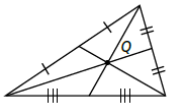
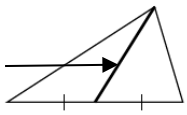
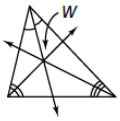
Math 2 Unit 4 Worksheet 4
Medians & Altitudes

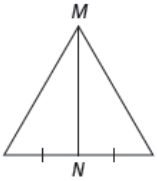
Name:_____
Date:_____ **Per:**_____

[1-10] Complete the below chart.

1.		$\overline{CD}$ is a _____ of $\overline{AB}$
2.		Point K is the _____ of the triangle.
3.		Point P is the _____ of the triangle.
4.		The segment shown is an _____.
5.		Point Q is the _____ of the triangle.
6.		The segment shown is a _____.
7.		Point W is the _____ of the triangle.
8.	Distance Formula	
9.	Midpoint Formula	
10.	Slope Formula	

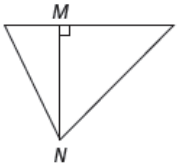
[11-13] Is $\overline{MN}$ a *median*, an *altitude*, or *neither*? Explain.

11. _____



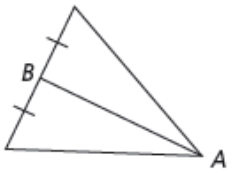
12. _____

13. _____

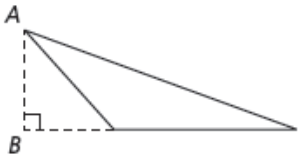


[14-17] Is $\overline{AB}$ a *median*, an *altitude*, or *neither*? Explain.

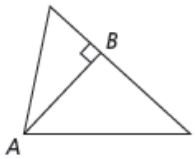
14. _____



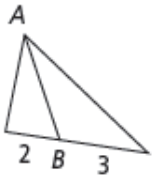
15. _____



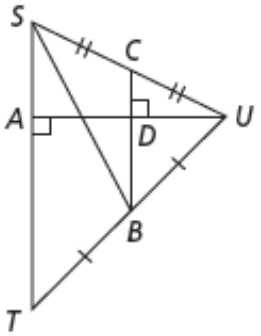
16. _____



17. _____



[18-21] Name each Segment.



18. A median in ΔSTU _____
19. An altitude in ΔSTU _____
20. A median in ΔSBU _____
21. An altitude in ΔCBU _____

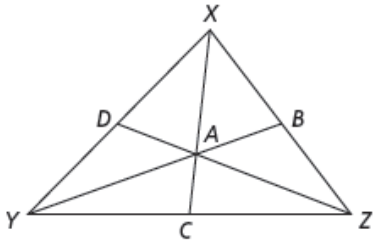
[22-24] In ΔXYZ, A is the centroid.

22. If $DZ = 12$, find ZA, AD, and describe the relationship between ZA and DZ.

    ZA = _____

    AD = _____

    ZA = _____ of DZ



23. If $AB = 6$, find BY and AY.

    BY = _____

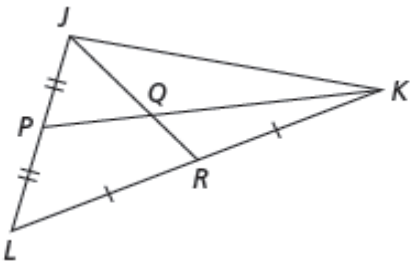
    AY = _____

24. If $AC = 3$, find CX and AX.

    CX = _____

    AX = _____

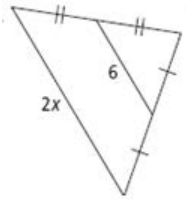
25. Q is the centroid of ΔJKL. $PK = 9x + 21y$.
    Write an expression to represent PQ and QK.



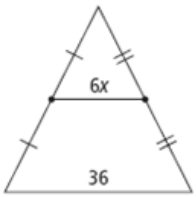
Review

[26-30] Find the value of x.

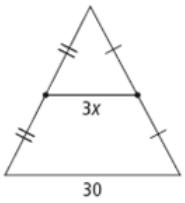
26. $x =$ _____



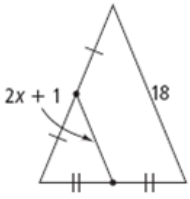
27. $x =$ _____



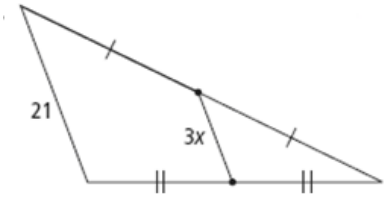
28. $x =$ _____



29. $x =$ _____



30. $x =$ _____

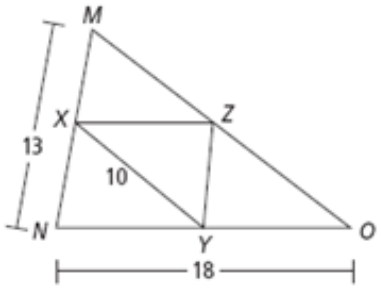


[31-33] X is the midpoint of $\overline{MN}$. Y is the midpoint of $\overline{ON}$. Z is the midpoint of $\overline{MO}$

31. Find XZ.

32. If $XY = 10$, find MO.

33. If $m\angle M$ is 64°, find $m\angle XYZ$.



[34-35] Use the diagram to answer the questions.

34. What is the distance across the lake?

35. Is it a shorter distance from A to B or from B to C? Explain.