

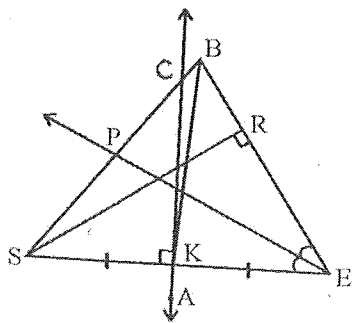
Geometry Chapter 5 Review

Determine whether the given measures can be the lengths of the sides of a triangle. Write yes or no and explain.

1. 10.4, 12.4, 23.3

2. 6, 8, 10

Use the diagram.



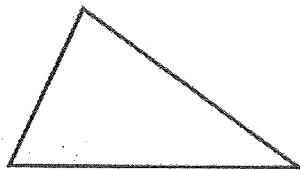
3. Name a median. 3. _____

4. Name an angle bisector. 4. _____

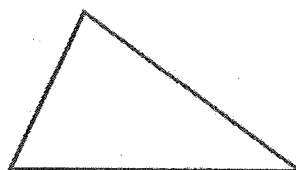
5. Name an altitude. 5. _____

6. Name a perpendicular bisector. 6. _____

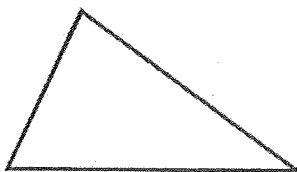
7. Sketch the line or line segment on the triangles below. Make the appropriate markings. Then name the point of concurrency for each.



Median



Angle Bisector

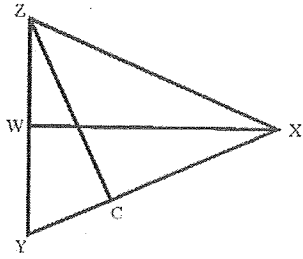


Perpendicular Bisector



Altitude

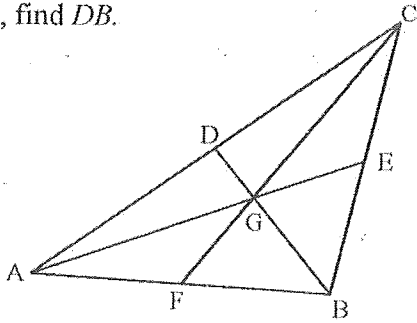
Use the diagram.



8. \overline{ZC} is an altitude. $\angle WZC = 13x$, $\angle CYW = 5x + 18$. Find $m\angle WZC$.

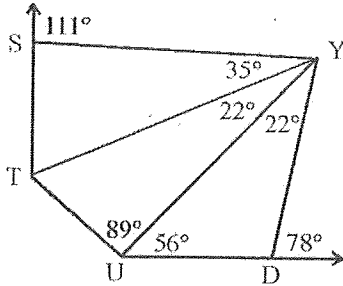
9. \overline{XW} is an angle bisector. $\angle WZX = 8x + 19$, $\angle XWZ = 89$, and $\angle ZXW = 6x - 12$. Find $m\angle WXY$.

10. If point G is the centroid of $\triangle ABC$ and $AE = 24$, and $DG = 5$, and $CG = 14$, find DB .



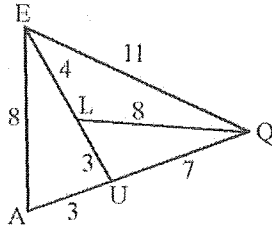
10. _____

11. Determine the relationship between the lengths of \overline{UD} and \overline{YS} .



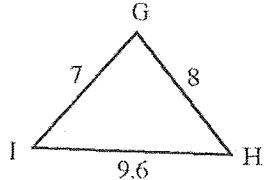
11. _____

12. Determine the relationship between the measures of $\angle EQU$ and $\angle AEQ$.



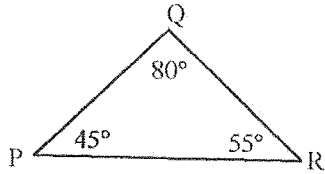
12. _____

13. List the angle of $\triangle GHI$ in order from least to greatest measure.



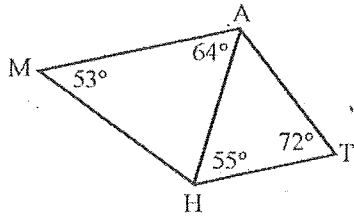
13. _____

14. List the sides of $\triangle PQR$ in order from shortest to longest.



14. _____

15. Name the longest segment in the figure below.



15. _____

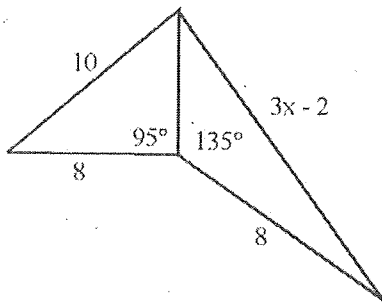
16. Draw in the shortest distance between P to \overleftrightarrow{NT} .

• P



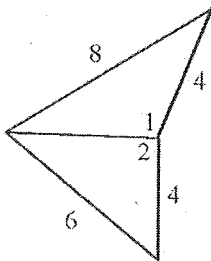
17. Write and solve an inequality to find x.

17. _____



18. Write an inequality comparing $m\angle 1$ and $m\angle 2$.

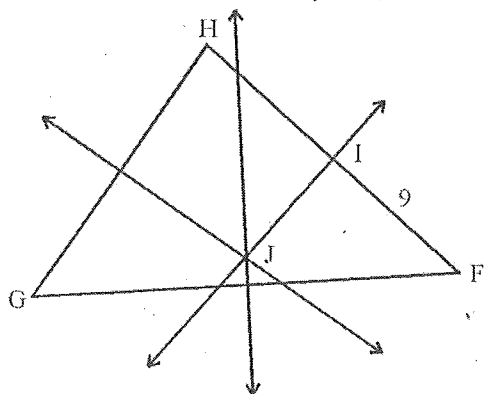
18. _____



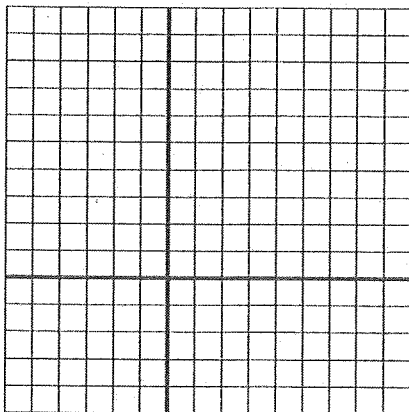
19. If two sides of a triangle are 24 meters long and 29 meters long, then the third side must have a length between what two measures?

19. _____

20. Lines s , t , and u are perpendicular bisectors of $\triangle FGH$ and meet at J . If $JG = 4x + 4$, $JH = 3y - 4$, $HI = 4z - 3$ and $JF = 8$, find x , y , and z .



21. The vertices of $\triangle LMN$ are $L(1, 3)$, $M(4, 0)$ and $N(-4, 1)$.
- Graph the triangle.



- \overline{LG} is a median of the triangle. What are the coordinates of point G ? b. _____

- Graph median \overline{LG} on the same graph.