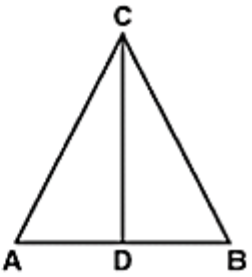
Unit 4 Quiz Review Name: _____Date: _____

1.

GIVEN: ΔABC, $\overline{CD} \perp \overline{AB}$
D midpoint of $\overline{AB}$.

PROVE: $\Delta ACD \cong \Delta BCD$

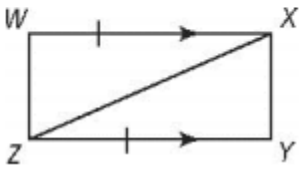


Statements	Reasons

2.

Given: $\overline{WX} \parallel \overline{YZ}, \overline{WX} \cong \overline{YZ}$

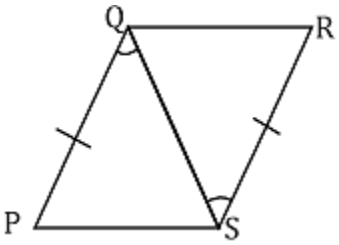
Prove: $\Delta WXZ \cong \Delta YZX$



Statements	Reasons

3-6: Can the two triangles be proven congruent? Circle YES or NO. If so, tell which postulate or theorem you used and finish the congruency statement.

3.

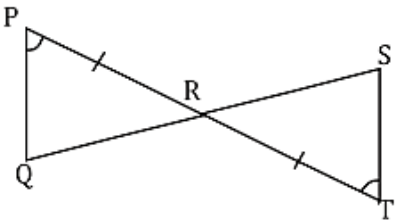


Congruent? Circle YES or NO

$\Delta PQS \cong \Delta$_____

by _____

4.

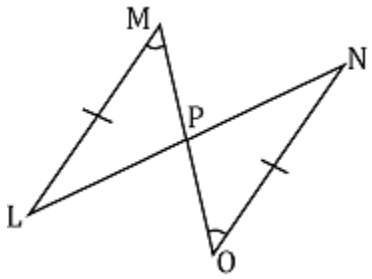


Congruent? Circle YES or NO

$\Delta QPR \cong \Delta$_____

by _____

5.

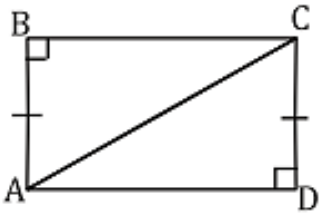


Congruent? Circle YES or NO

$\Delta MPL \cong \Delta$_____

by _____

6.



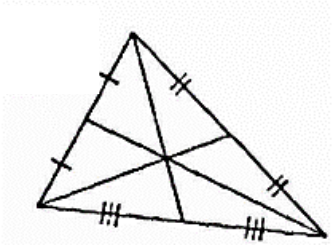
Congruent? Circle YES or NO

$\Delta ABC \cong \Delta$_____

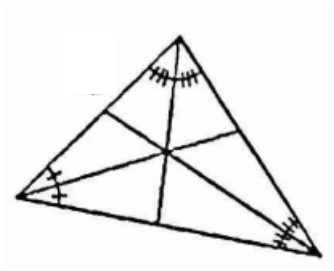
by _____

7-10: Match the picture with the corresponding point of concurrency.

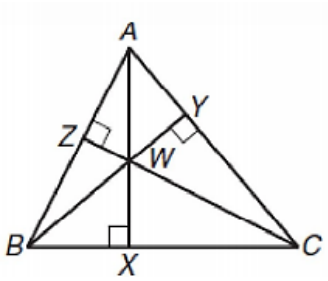
_____ 7.



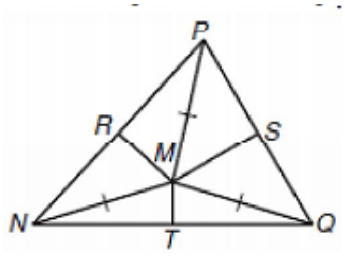
_____ 8.



_____ 9.



_____ 10.



A. Centroid

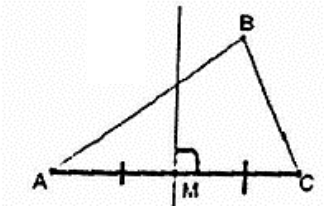
B. Incenter

C. Circumcenter

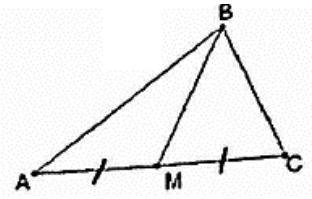
D. Orthocenter

11-14: Match the picture with the corresponding segments.

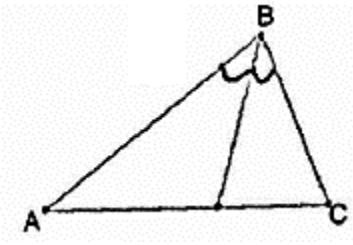
_____ 11.



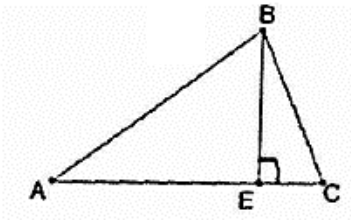
_____ 12.



_____ 13.



_____ 14.



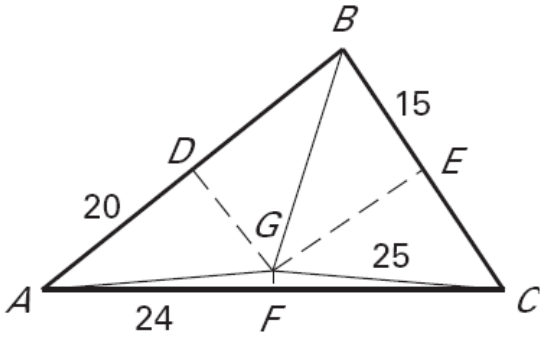
E. Median

F. Angle Bisector

G. Perpendicular Bisector

H. Altitude

In the diagram, the perpendicular bisectors (shown with dashed segments) of ΔABC meet at point *G*--the *circumcenter*. and are shown dashed. Find the indicated measure.



15. AG = _____ 20. BD = _____

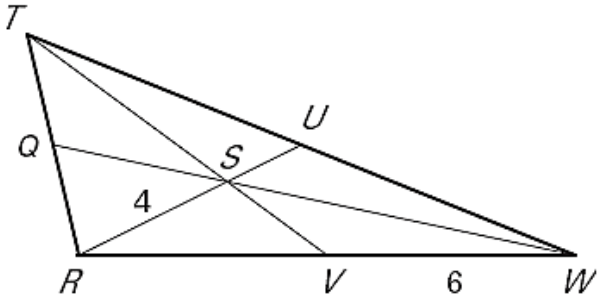
16. CF = _____ 21. AB = _____

17. CE = _____ 22. AC = _____

18. m∠ADG = _____

19. IF BG = (2x – 15), find x.

Point *S* is the *centroid* of ΔRTW, *RS* = 4, *VW* = 6, and *TV*= 9. Find the length of each segment.



20. RV = _____

21. SU = _____

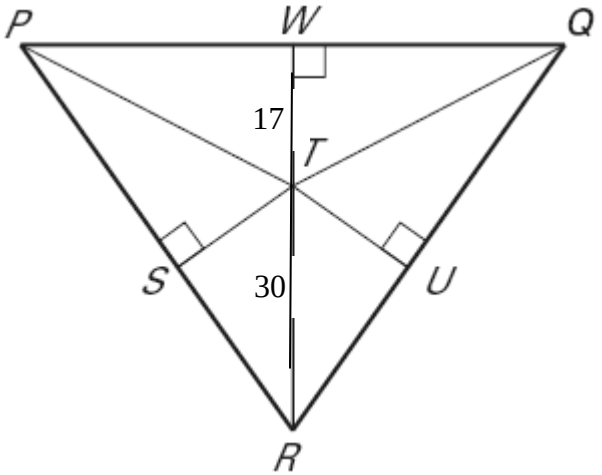
22. RU = _____

23. RW = _____

24. TS = _____

25. SV = _____

Point *T* is the *incenter* of ΔPQR.



26. If Point T is the ***incenter***, then Point T is the point of concurrency of

the _____.

27. ST = _____

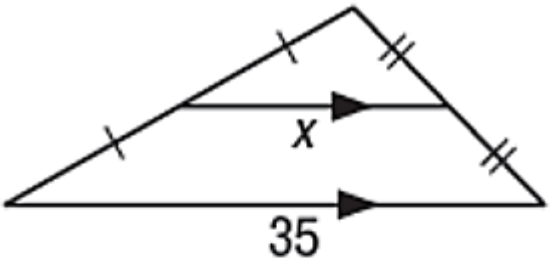
28. If TU = (2x – 3), find x.

x = _____

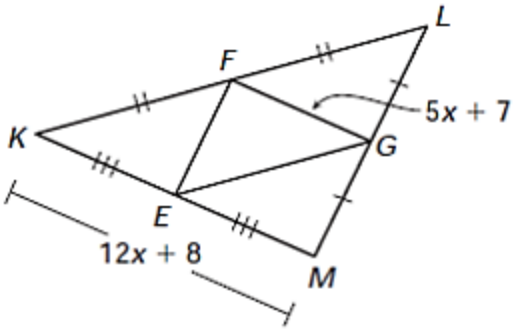
29. If m∠PRT = 34º, then m∠QRT = _____

30. If m∠RPQ = 52º, then m∠RPT = _____

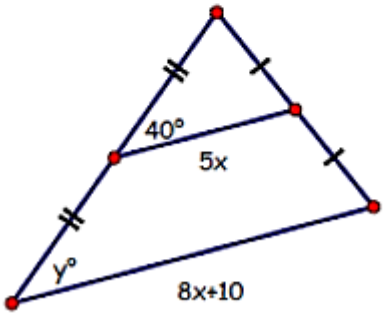
31. Solve for each variable.



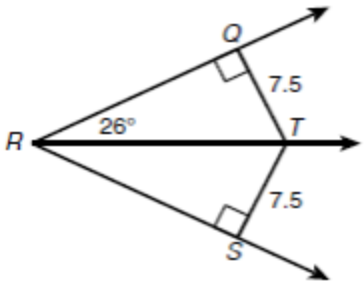
32. Use the diagram below to find FG.



33. Solve for x and y.



34. Find the m<QRS.



35. Find the m<WXZ.