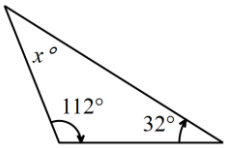
SM2H

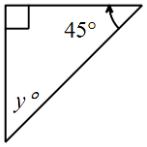
Name:_____ Period:_____

7.4 Triangles

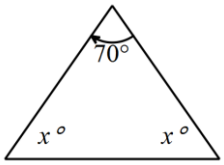
1. Find x.



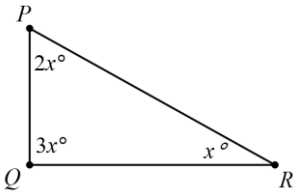
2. Find y.



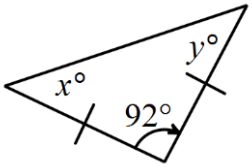
3. Find x.



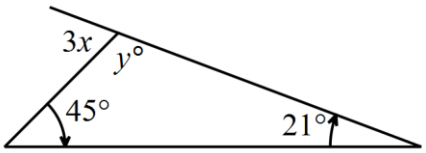
4. Find $m\angle P, m\angle Q,$ and $m\angle R$



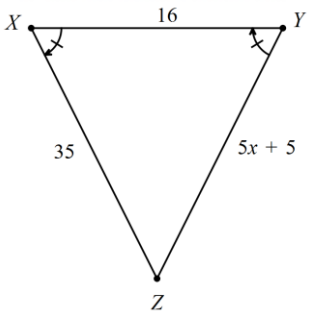
5. Find x and y.



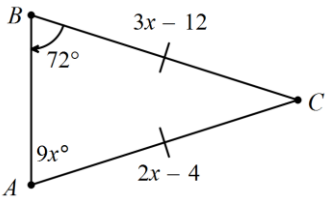
6. Find x and y.



7. Find x and YZ.

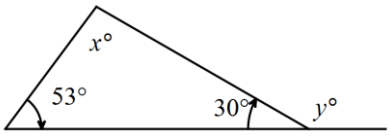


8. Find x and $m\angle A, BC,$ and AC.

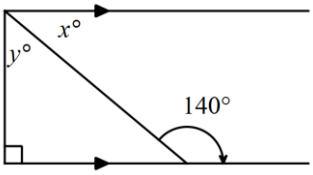


Find the value of x and y.

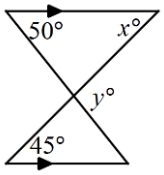
9.



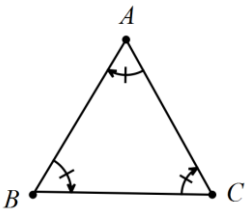
10.



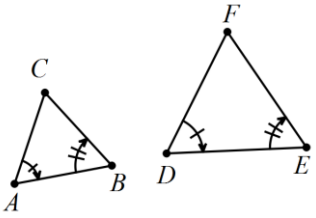
11.



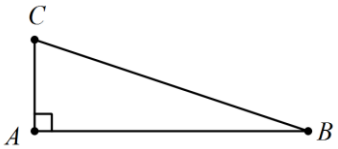
12. If $m\angle A \cong m\angle B \cong m\angle C$, then find $m\angle A$, $m\angle B$ and $m\angle C$.



13. $m\angle A \cong m\angle D$ and $m\angle B \cong m\angle E$, then $m\angle$___ $\cong m\angle$___

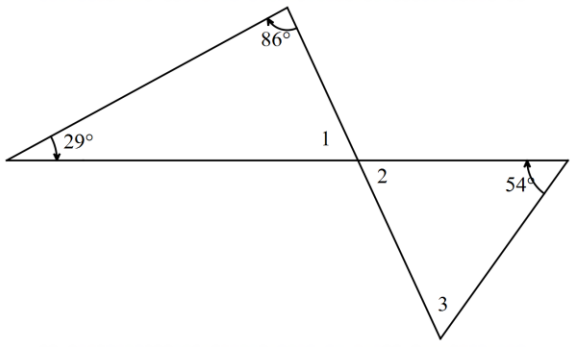


14. If $m\angle A = 90$, then $m\angle B + m\angle C =$ ___



Find the missing angle measures.

15.

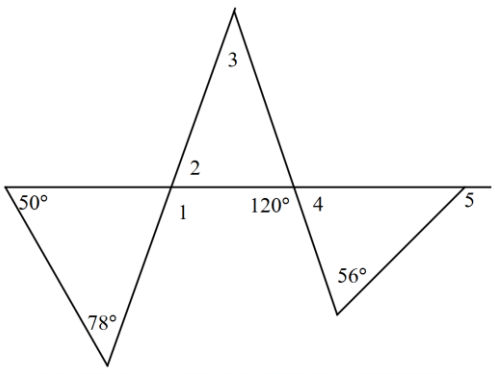


$m\angle 1 =$_____

$m\angle 2 =$_____

$m\angle 3 =$_____

16.

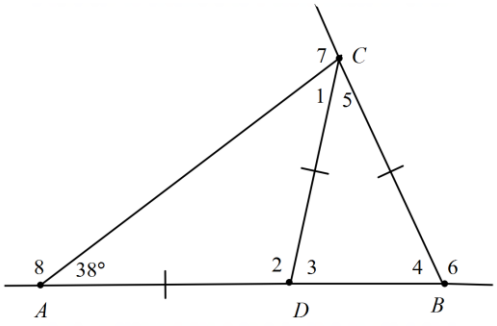


$m\angle 1 =$_____ $m\angle 4 =$_____

$m\angle 2 =$_____ $m\angle 5 =$_____

$m\angle 3 =$_____

17. Find the missing angle measures.



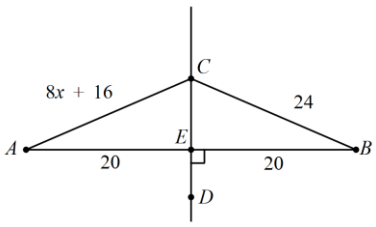
$m\angle 1 =$ _____ $m\angle 5 =$ _____

$m\angle 2 =$_____ $m\angle 6 =$_____

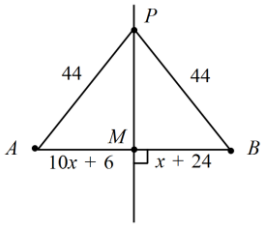
$m\angle 3 =$_____ $m\angle 7 =$_____

$m\angle 4 =$_____ $m\angle 8 =$_____

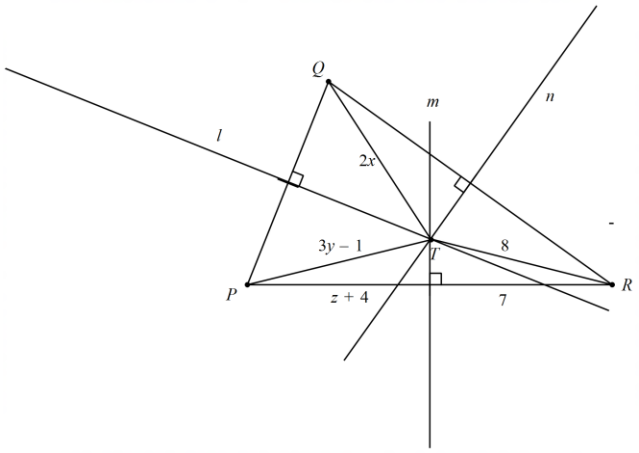
18. Find *x* and *AC*.



19. Find *x, AM* and *MB*



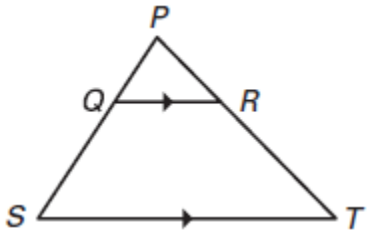
20. Lines l, m. and n are perpendicular bisectors of triangle PQR. Find x, y, and z.



Complete the proportion using the figure to the right.

21. $\frac{PQ}{QS} = \frac{PR}{?}$

22. $\frac{?}{TP} = \frac{SQ}{SP}$

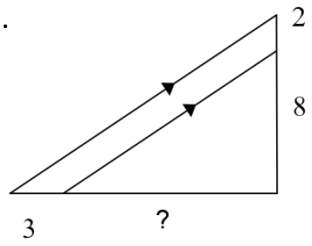


23. $\frac{PQ}{PS} = \frac{?}{PT}$

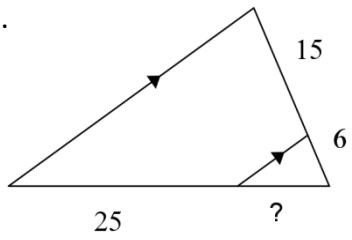
24. $\frac{TR}{?} = \frac{SQ}{QP}$

Find the missing length. Show your work!

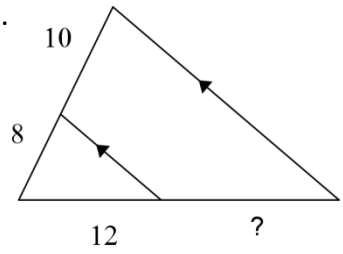
25.



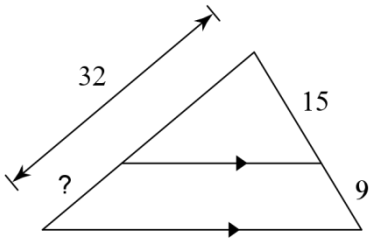
26.



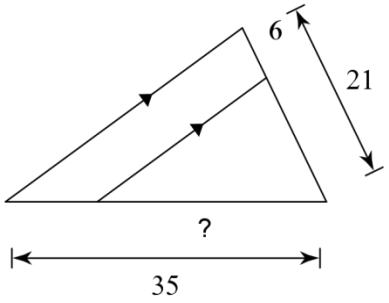
27.



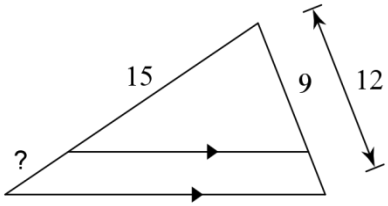
28.



29.

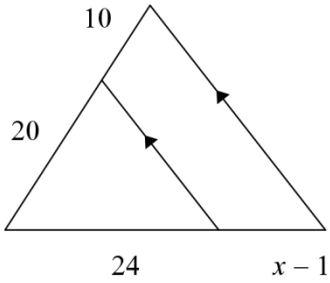


30.

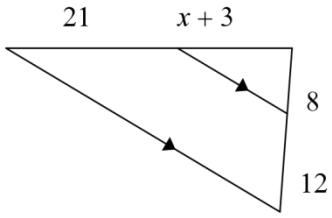


Solve for *x*. Show your work!

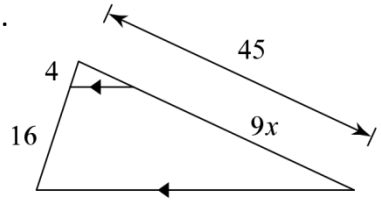
31.



32.

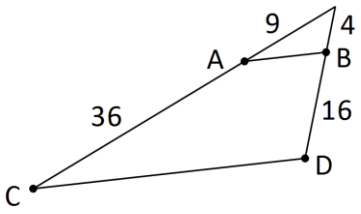


33.

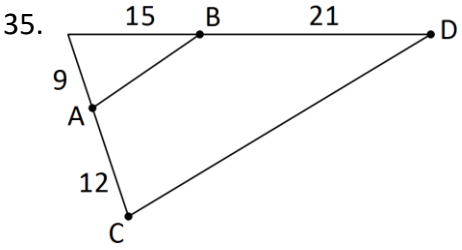


Given each diagram, determine whether $\overline{AB} \parallel \overline{CD}$. Show work to support your answer!

34.

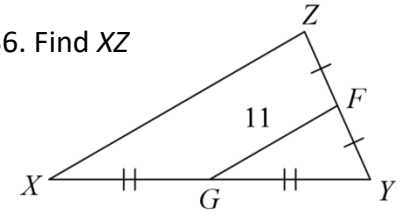


35.

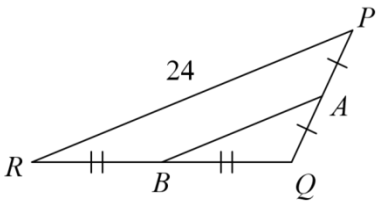


Find the missing length indicated.

36. Find *XZ*

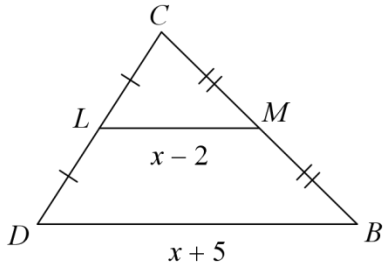


37. Find *AB*

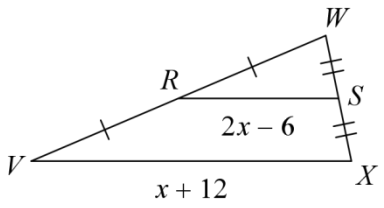


Solve for *x*. Show your work!

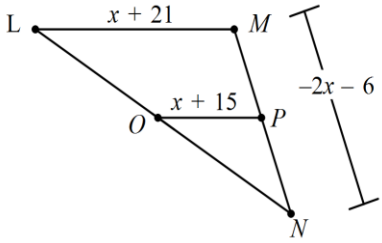
38.



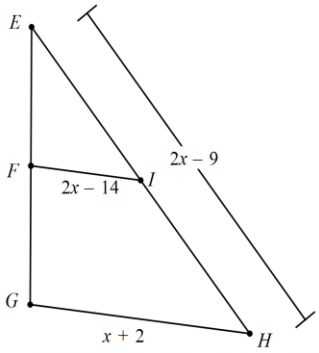
39.



40. If $\overline{MP} = \overline{PN}$ and $\overline{LO} = \overline{ON}$, find *OP*.



41. If $\overline{FI}$ is the mid segment of $\triangle EGH$, find *GH*.



The sides of $\triangle DEF$ are all midsegments of $\triangle ABC$. Find each of the requested lengths.

42. *BD* = _____ *DA* = _____ *EF* = _____

CE = _____ *EB* = _____ *FD* = _____

CF = _____ *FA* = _____ *DE* = _____