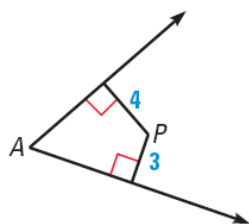


Name: _____

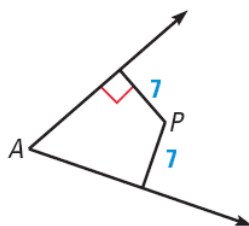
Perpendicular and Bisectors of a Triangle

Exercise 1: Tell whether the information in each diagram allows you to conclude that P is on the bisector of $\angle A$. Explain.

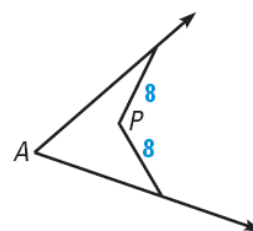
1)



2)

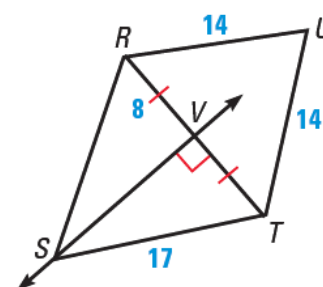


3)



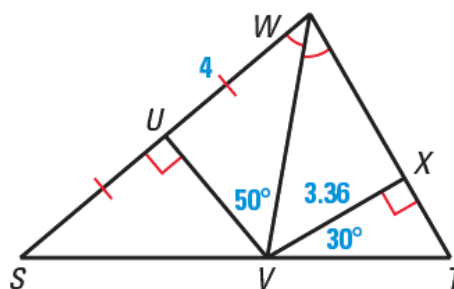
Exercise 2: Use the diagram shown.

- $\overline{SV} \perp \overline{RT}$ and $\overline{VR} \cong \overline{VT}$. Find VT
- $\overline{SV} \perp \overline{RT}$ and $\overline{VR} \cong \overline{VT}$. Find SR
- \overline{SV} is the perpendicular bisector of \overline{RT} . $UR=UT=14$, what can you conclude about point U? Verify your answer.



Exercise 3: Use the diagram, to find:

- SW
- VU
- WX
- $m\angle VWX$
- $m\angle XTV$
- $m\angle WVX$



Exercise 4: Use the diagram to answer the questions:

- \overline{JN} bisects $\angle HJK$, $\overline{NP} \perp \overline{JP}$, $\overline{NQ} \perp \overline{JQ}$, and $NP=2$. Find NQ
- \overline{JN} bisects $\angle HJK$, $\overline{MH} \perp \overline{JH}$, $\overline{MK} \perp \overline{JK}$, and $MH=MK=6$. What can you conclude about point M?

