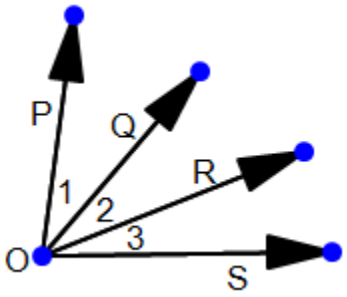
Name: _____

Adjacent Angles and Angle Bisector

Find the indicated measure. (Show your way.)

1) m∠POR = 80
m∠2 = 25
Find m∠1.

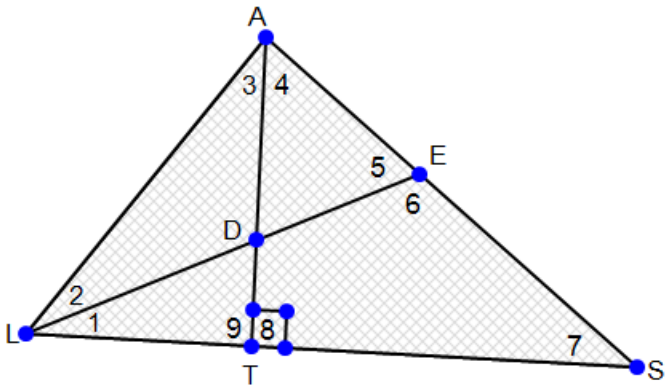
2) m∠QOS = 100
m∠3 = 65
Find m∠2.



3) m∠POR = 125
m∠3 = 35
Find m∠POS.

4) m∠QOS = 49
m∠1 = 23
Find m∠POS

Refer to the diagram to complete each statement



5) $m\angle 3 + m\angle 4 = m\angle$ _?_

6) $m\angle ALS - m\angle 2 = m\angle$ _?_

7) $m\angle ADL + m\angle ADE =$ _?_

8) If $m\angle 1 = m\angle 2$, then _?_ bisects _?_.

9) If $\overrightarrow{AT}$ bisects ∠LAS, then ∠_?_ ≅ ∠_?_

Draw a figure then find the indicated measure.

21) ∠AOT and ∠TOG are adjacent angles, m∠AOG = 100, and m∠AOT = 3(m∠TOG). Find m∠TOG.

22) $\overrightarrow{OC}$ bisects ∠AOB, $\overrightarrow{OD}$ bisects ∠AOC, $\overrightarrow{OE}$ bisects ∠AOD, $\overrightarrow{OF}$ bisects ∠AOE and $\overrightarrow{OG}$ bisects ∠FOC.

a) If m∠BOF = 120, find m∠DOE.

b) If m∠COG = 35, find m∠EOG