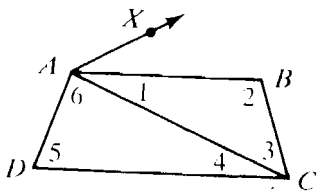
Geometry
1.4 /1.5

HW #____ Name_____

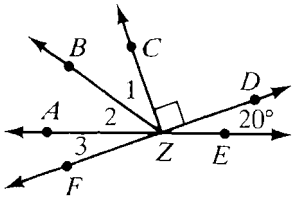
Period_____ Column_____

Use the diagram below.



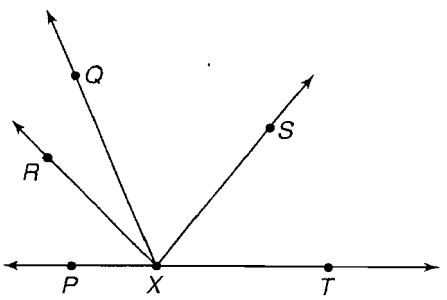
1. Name the vertex of ∠XAC.
2. Name the sides of ∠XAC.
3. Give another name for ∠ 4 _____ ; for ∠ 2 _____

Use the diagram below.



4. ∠ 2 and ∠ 3 are adjacent angles. Name their common vertex _____ and common side _____.
5. m∠ CZD = _____, m∠ AZC = _____, m∠ FZC = _____
6. If $\overrightarrow{ZB}$ bisects ∠AZC, then m∠ _____ = m∠ _____.
7. If m∠3 = 20, m∠ 2 = 3x - 5, and m∠1 = 2x + 10, find x.

In the figure below, $\overrightarrow{XP}$ and $\overrightarrow{XT}$ are opposite rays and $\overrightarrow{XQ}$ bisects ∠PXS.



8. m∠ SXT = 4x+ 1, m∠ QXS = 2x -2 , and m∠ QXT = 125. Find x and m∠ QXS.
9. m∠ PXR = 3x, m∠ RXT = 5x + 20. Find x and m∠ RXT.
10. m∠ PXQ = 8x - 49, m∠ QXS = 5x - 4. Find x and m∠ PXS.