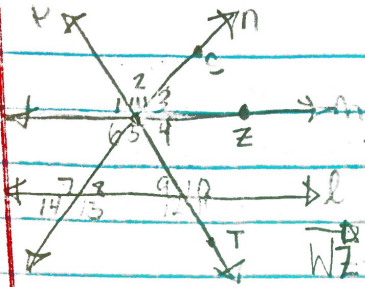


9-21-16



$$m\angle 2 = 6x - 7 \quad m\angle 2 + m\angle 3 = m\angle 10 \quad m\angle 3 = m\angle 8$$

$$m\angle 3 = 7x - 2 \quad 6x - 7 + 7x - 2 = 12x \quad 7(9) - 2 = m\angle 8$$

$$m\angle 10 = 12x \quad 13x - 9 = 12x \quad 63 - 2 = m\angle 8$$

$$\text{find } m\angle 8 \quad x = 9 \quad 61 = m\angle 8$$

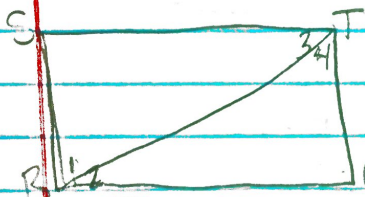
\overline{WZ} bisects $\angle SWT$

$$m\angle 4 + m\angle 10 = 180 \quad 5(11) - 2 \quad 10(11) + 17$$

$$m\angle 4 = 5x - 2 \quad 5x - 2 + 10x + 17 = 180 \quad 53 \quad 127$$

$$m\angle 10 = 10x + 17 \quad 15x + 15 = 180 \quad 127 - 53 = \boxed{74^\circ}$$

$$\text{Find } m\angle 2 \quad x = 11 \quad m\angle 3 = m\angle 4$$



$$m\angle 2 = 4x + 5 \quad 4x + 5 + 10x + 1 = 90 \quad 4(6) + 5$$

$$m\angle 4 = 10x + 1 \quad 14x + 6 = 90 \quad 24 + 5$$

$$\text{find } m\angle 3 \quad x = 6 \quad \boxed{29^\circ}$$

$\overline{ST} \parallel \overline{RQ}$
 $\overline{ST} \perp \overline{TQ}$

Find the midpoint for $A(7x - 6, 4y + 9)$, $B(10x - 4, 2y - 8)$

$$\frac{7x - 6 + 10x - 4}{2} = \frac{17x - 10}{2} = \frac{17}{2}x - 5$$

$$\frac{4y + 9 + 2y - 8}{2} = \frac{6y + 1}{2} = 3y + \frac{1}{2} \quad \left(\frac{17}{2}x - 5, 3y + \frac{1}{2}\right)$$