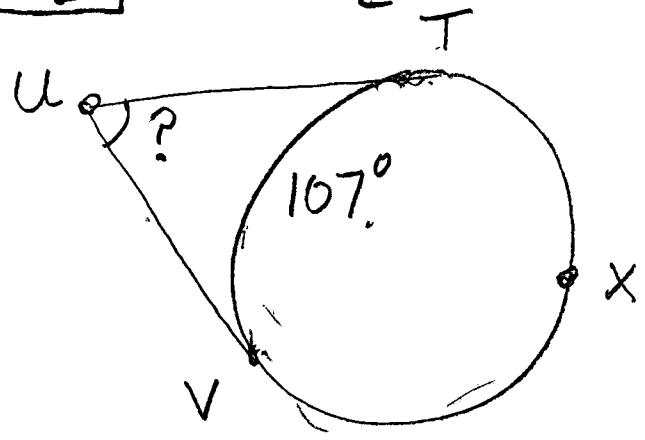
# Geometry Monday 1-14-13 Class Notes

① 


$5\ 1$
$3\cancel{6}0$
$-\ 107$
$253$

$\overset{\frown}{TV} = 107°$

$\overset{\frown}{TXV} = 253°$

$\frac{253-107}{2} = \frac{146}{2}$

$= \boxed{73°}$

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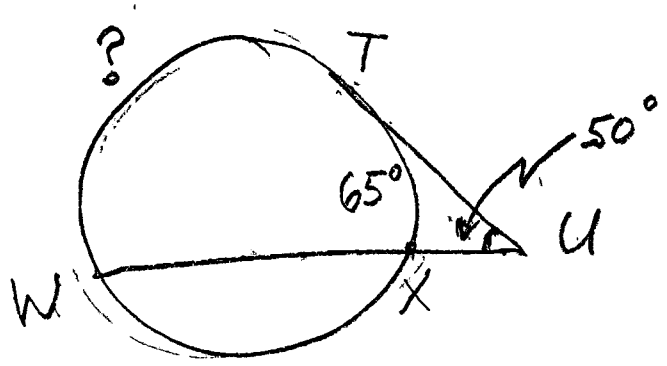
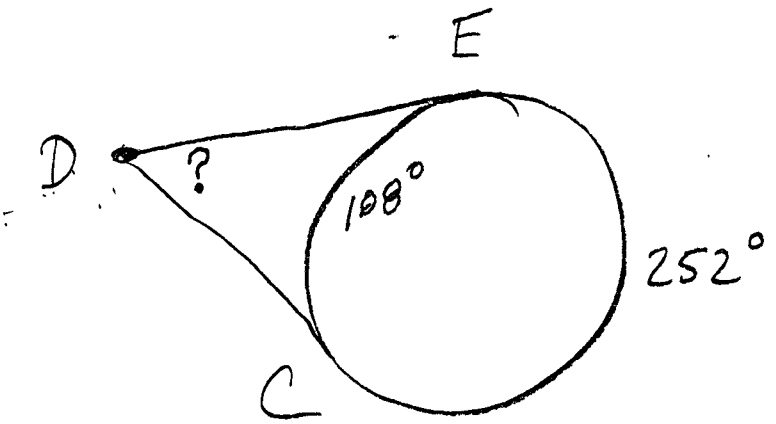
⑦ 


$\frac{\overset{\frown}{WT} - 65}{2} = 50$

$\overset{\frown}{WT} - 65 = 100$

$\boxed{\overset{\frown}{WT} = 165°}$ ✓

(5)




$360 - 252 = 108°$

$\frac{252 - 108}{2} = D$

$\frac{144}{2} = \boxed{D = 72°}$

41
252
−108
144

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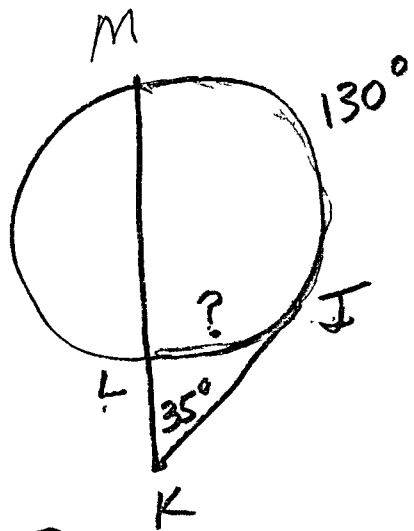
(10)

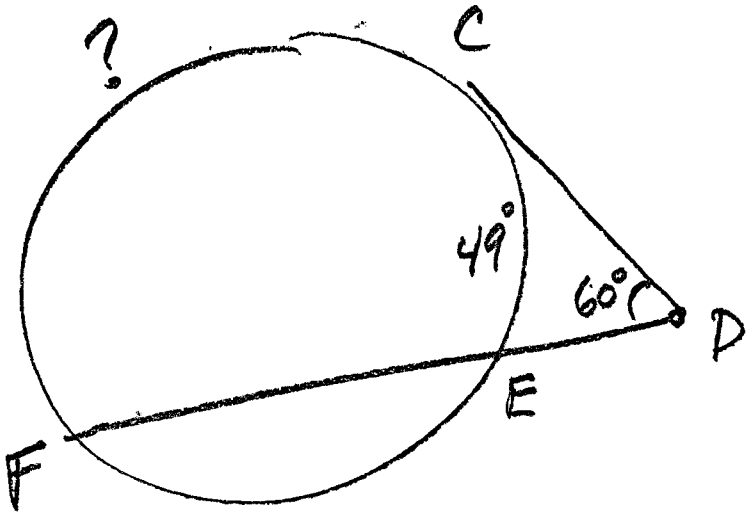



$\frac{130 - \overset{\frown}{IL}}{2} = 35$

$130 - \overset{\frown}{IL} = 70$

$-\overset{\frown}{IL} = -60 \therefore \boxed{\overset{\frown}{IL} = 60°}$

(9)



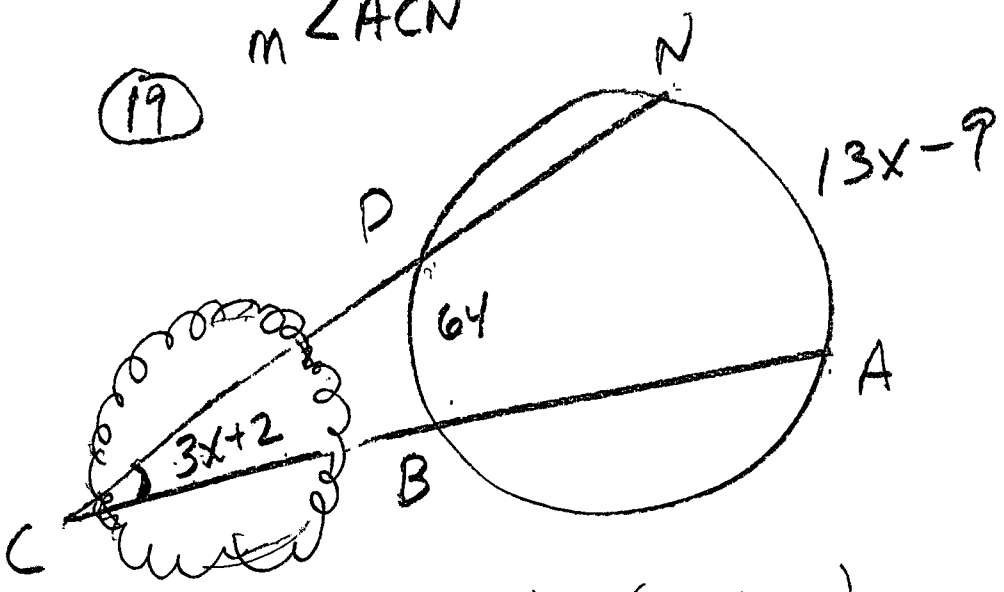

$$\frac{\overset{\frown}{CF} - 49}{2} = 60$$

$$\overset{\frown}{CF} - 49 = 120$$

$$+49 \qquad +49$$

$$\overset{\frown}{CF} = 169^\circ$$

(19) $m\angle ACN$




$$\frac{(\text{big arc}) - (\text{small arc})}{2} = m\text{Angle}$$

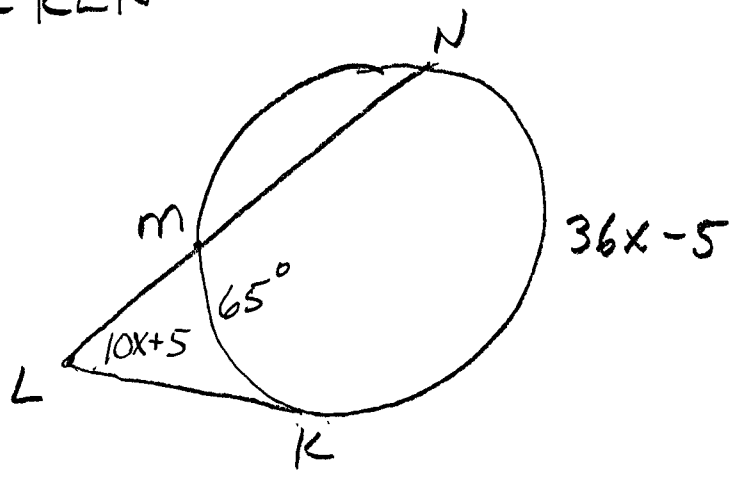
$$\frac{(13x-9) - (64)}{2} = 3x+2$$

$$13x - 73 = 6x + 4$$
$$-6x \quad +73 \quad -6x \quad +73$$
$$\frac{7x}{7} = \frac{77}{7}$$

$$x = 11$$

$3(11) + 2 = 35^{\circ} = m\angle ACN$

(20) $m\angle KLN$




$$\frac{(36x-5)-(65)}{2} = 10x+5$$

$$36x-70 = 20x+10$$

$$-20x \qquad -20x$$

$$16x-70 = 10$$

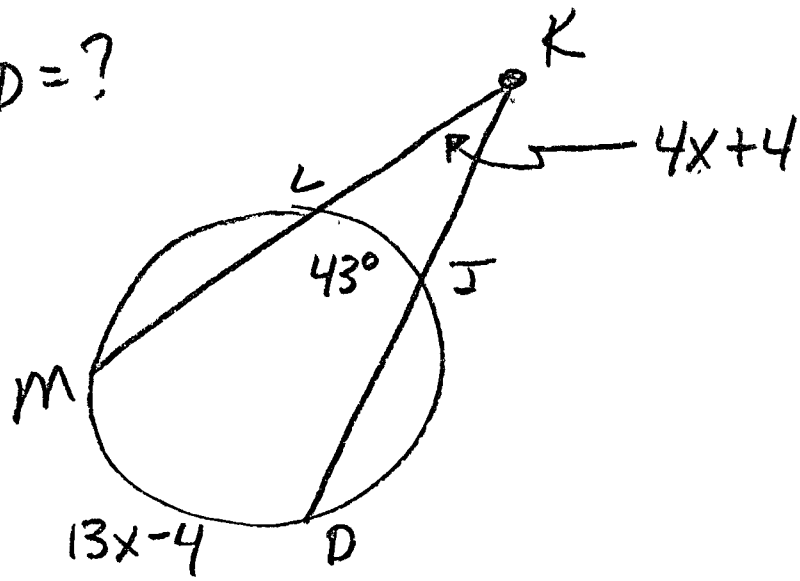
$$\frac{16x}{16} = \frac{80}{16}$$

$$x = 5$$

$\therefore$ $10(5)+5$

$m\angle KLN = 55^\circ$

(21) $m\angle MKD = ?$




$$\frac{(13x-4)-(43)}{2} = 4x+4$$

$$13x-4-43 = 8x+8$$

$$13x-47 = 8x+8$$

$$-8x \qquad -8x$$

$$5x-47 = 8$$

$$+47 \quad +47$$

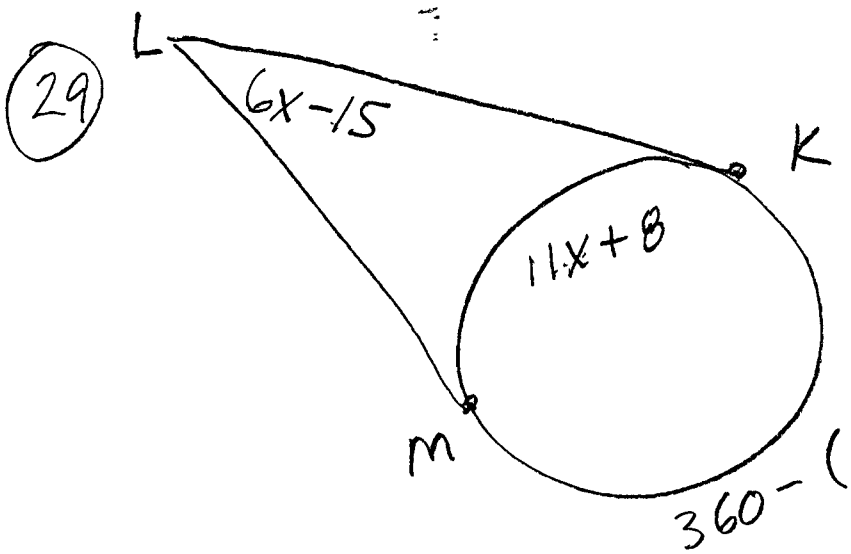
$$\frac{5x}{5} = \frac{55}{5}$$

$$x = 11$$

$\therefore$ $m\angle MKD = 4(11)+4$

$= 48°$

(29)




$m\angle KLM = ?$

$$\frac{[360-(11x+8)]-(11x+8)}{2} = 6x-15$$

$$\frac{360-11x-8-11x-8}{2} = 12x-30$$

$$344-22x = 12x-30$$

$$+30 \quad +22x \qquad +22x \quad +30$$

$$\frac{374}{34} = \frac{34x}{34}$$

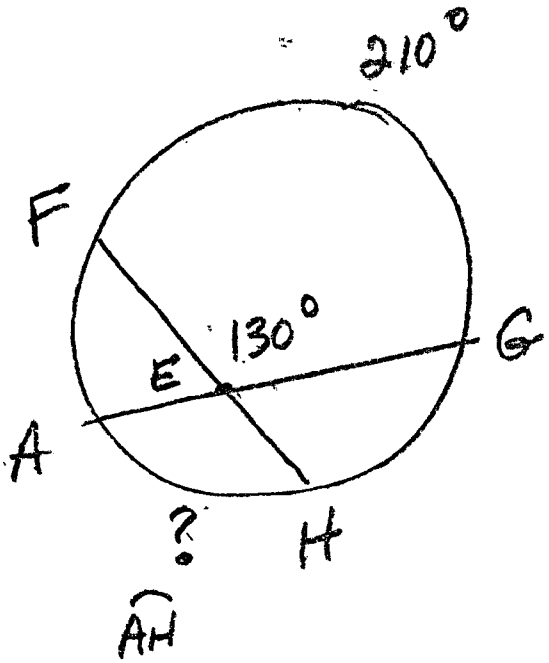
$$11 = x$$

$\therefore 6(11)-15$

$66-15$

$51^\circ = m\angle KLM$ ✓

(46)




$\overset{\frown}{AH}$

$$\frac{210^\circ + \overset{\frown}{AH}}{2} = 130$$

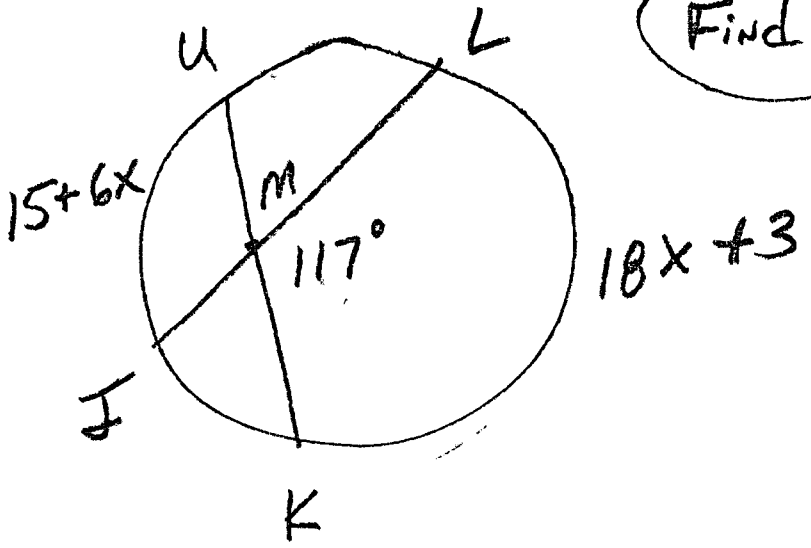
$$210 + \overset{\frown}{AH} = 260$$

$-210 \qquad -210$

$$\boxed{\overset{\frown}{AH} = 50^\circ}$$

56

Find X




$$\frac{(18x+3)+(15+6x)}{2} = 117$$

$$18x+3+15+6x = 234$$

$$24x+18 = 234$$

$$-18 \quad -18$$

$$\frac{24x}{24} = \frac{216}{24} = \frac{108}{12}$$

$$x = 9$$