Geometry Wedn. 5-15-13 Class Notes
Worksheet Practice

Center, radius

(4) $(x-1)^2 + (y+1)^2 = 121$

$(x-h)^2 + (y-k)^2 = r^2$

$C(h,k)$ $r = \sqrt{r^2}$

$C(1,-1)$ $r = 11$

h, k

(6) $\mathcal{E}_o C \Rightarrow C\left(-\frac{17}{2}, -11\right)$, $r = 6$

$\left(x+\frac{17}{2}\right)^2 + (y+11)^2 = 36$

(12) $C(4,1)$ $r = 1$

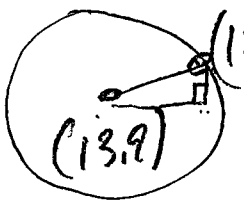
$(x-4)^2 + (y-1)^2 = 1$

(21) Point on Circle $(3,1)$
x, y

⑩ C(13,9), Point on Circle(12,7)

h, k

Eq. of Circle



(13, 9), (12, 7)

$r^2 = (7-9)^2 + (12-13)^2$

rise² run²

$r^2 = 4 + 1 = 5$

$(x-13)^2 + (y-9)^2 = 5$

$C_0 = 2\pi r$

$A_0 = \pi r^2$

(16) $r = 3$ in $\quad C = ?$

$$C = 2\pi(3) = 6\pi \text{ in}$$

---

(29) $r = 10$ yd $\quad A = ?$

$$A = \pi r^2 = \pi(10)^2$$

$$A = 100\pi \text{ yd}^2$$

(17.) $A_{\odot} = ?$ $\pi = \frac{22}{7}$ $r = 7.4\,mi$

$A = \pi r^2 = \frac{22}{7}(7.41)^2$

$= \frac{22}{7} \cdot 54.76$

$= \frac{1204.72}{7}$

$A = 172.10$

$\boxed{A = 172.1\,mi^2}$

$C = ?$ $C = 2\pi r$

$C = 2\left(\frac{22}{7}\right)7.4$

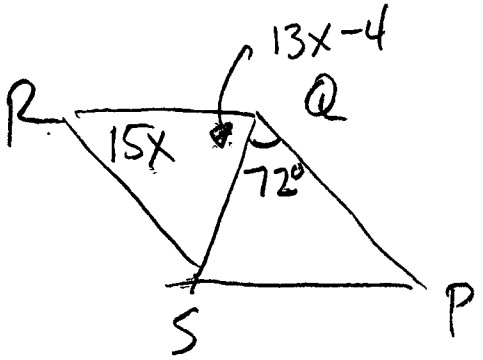
$C = \frac{44}{7} \cdot 7.4$

$C = \frac{325.6}{7} = 46.51$

$\boxed{C = 46.5\,mi}$

(55) $\frac{360}{7} = 51.\overline{428571}4$

$\boxed{51.4^\circ}$

(73) 

$m\angle RSP$

$$(13x-4)+15x+72=180$$

$$28x+68=180$$
$$-68 \quad -68$$

$$\frac{28x}{28}=\frac{112}{28}$$

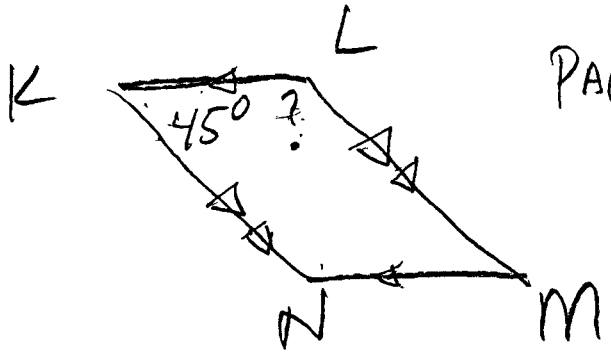
$$x=\frac{56}{14}=\frac{8}{2}=4$$

$\therefore m\angle RSP = 13(4)-4+72$

$= 48+72$

$m\angle RSP = 120^\circ$

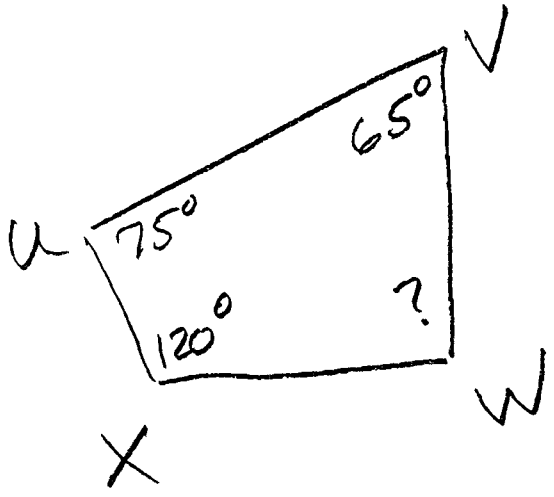
(67)



PARALLELOGRAM

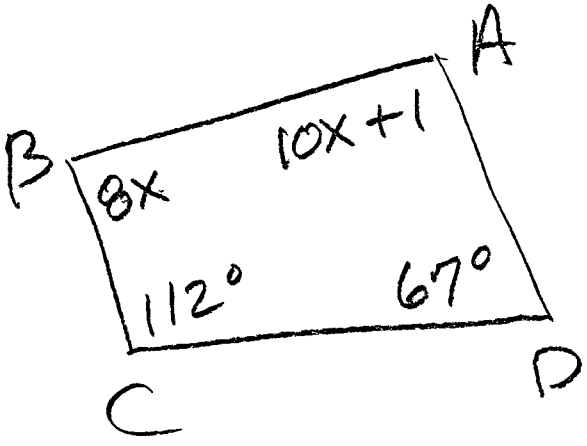
$m\angle L = 135^\circ$

(76)



$m\angle W = 100^\circ$

(80)



$m\angle B = ?$

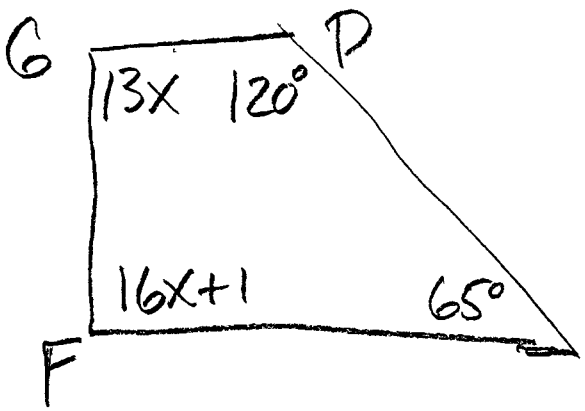
$$8x + (10x+1) + 112 + 67 = 360$$

$$18x + 180 = 360$$

$$18x = 180$$

$x = 10$ $\therefore$ $8(x) = 80^\circ$ $m\angle B$

(79)



$m\angle F = ?$

$13x + 120 + 16x + 1 + 65 = 360$

$29x + 186 = 360$
$-186 \quad -186$
$29x = 174$

$\frac{29x}{29} = \frac{174}{29}$

$x = 6$

$\therefore m\angle F = 16(6) + 1$
$= 96 + 1$

$m\angle F = 97°$