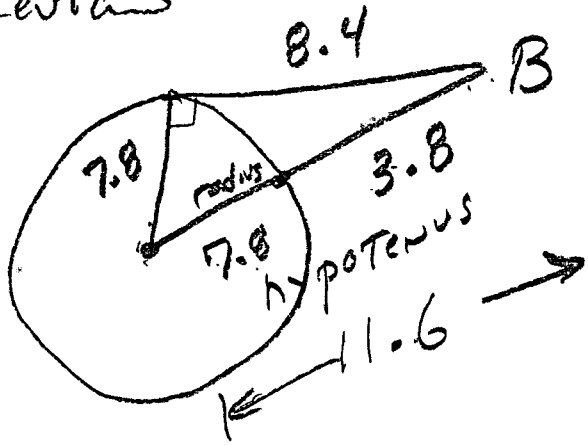
Geometry FRIDAY 2-1-13 CLASS NOTES

Exam Review

(1)

ID1



TANGENT?

$11.6^2 \stackrel{?}{=} 7.8^2 + 8.4^2$

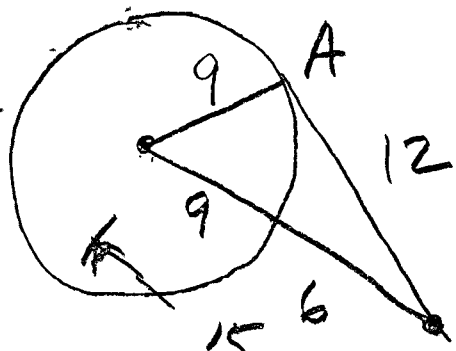
116	78	84
× 11.6	× 78	× 84
696	624	336
116	546	672
116	6084	7056
134.56	→ 6084	→ 6084
	NOT =	1340.40

NOT TANGENT

(2) ID 2

TANGENT

$c^2 \stackrel{?}{=} a^2 + b^2$



$15^2 \stackrel{?}{=} 9^2 + 12^2$

$225 = 81 + 144 = 225$ ✓ yes, tangent

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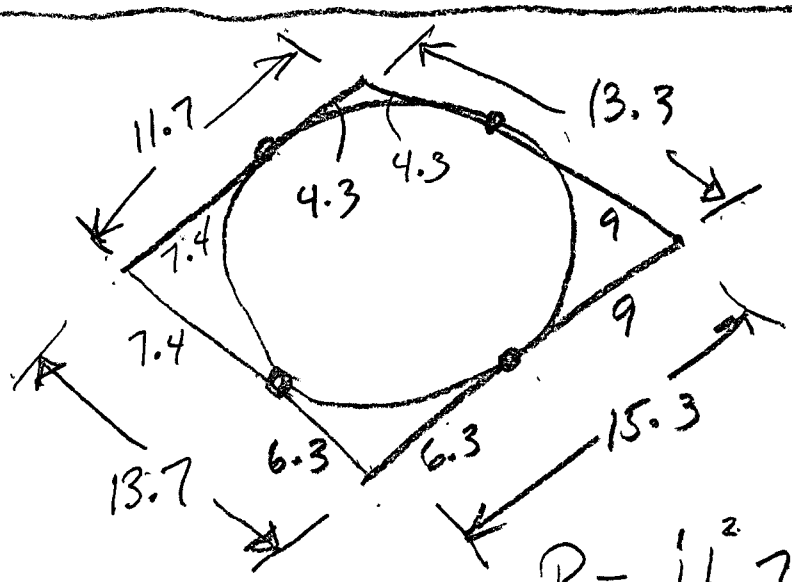
(4) ID 1

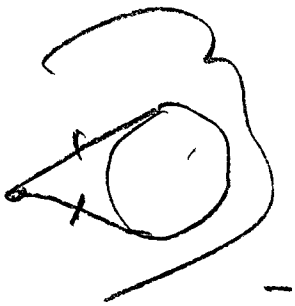


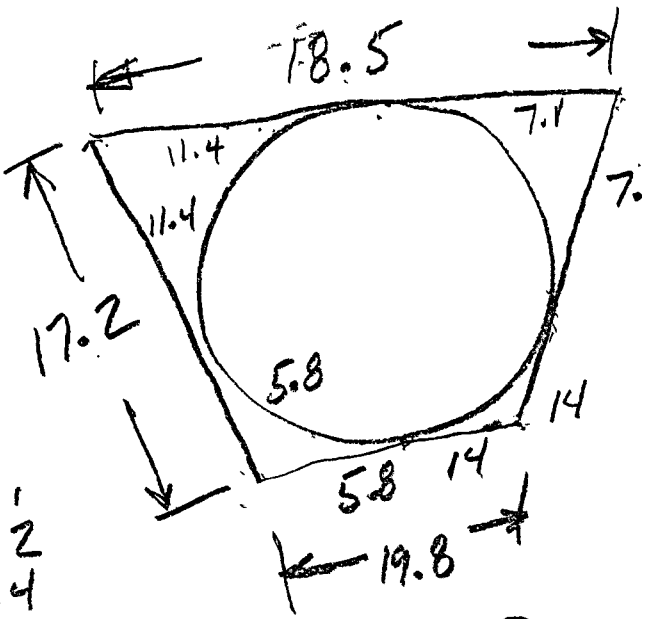
$P = 11.7 + 13.7 + 15.3 + 13.3$

$P = 54.0$

(3.)

ID1





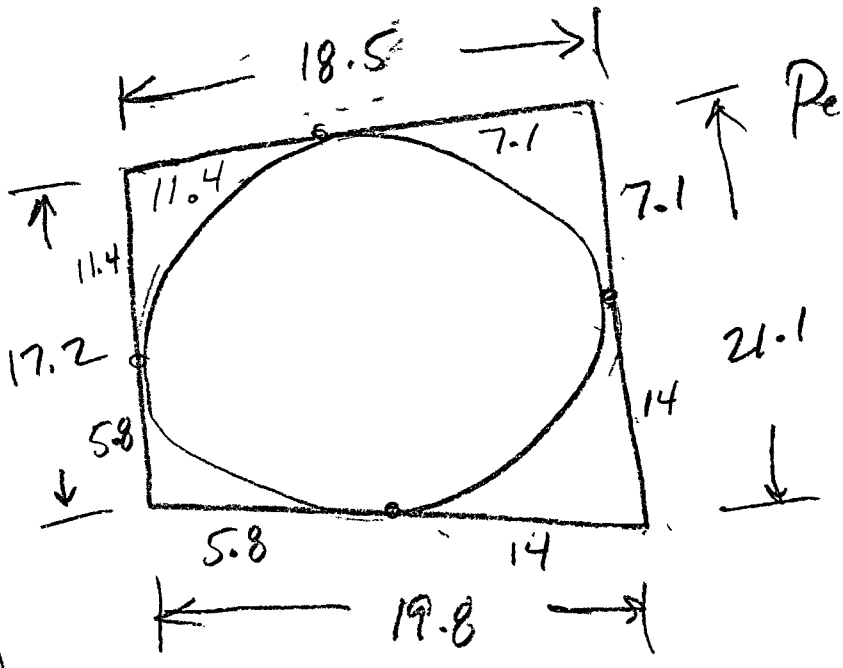
$$\begin{array}{r} {}^{6}\cancel{1}{}^{1}7.2 \\ -\,11.4 \\ \hline 5.8 \end{array}$$

$$P = {}^{2}21.1 + 18.5 + 17.2 + 19.8$$

$$P = \boxed{76.6}$$

(3.)

ID1

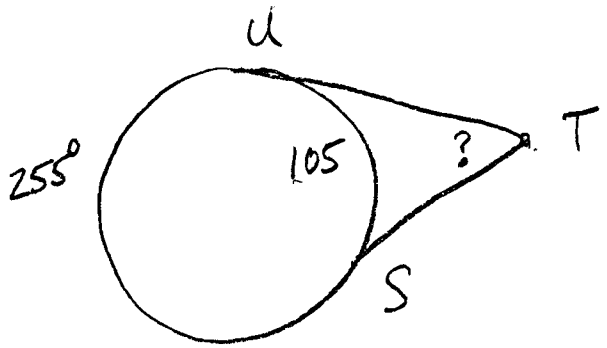


$$\begin{array}{r} 10.2 \\ -\ 11.4 \\ \hline 5.8 \end{array}$$

$$P = 21.1 + 18.5 + 17.2 + 19.8$$

$$\boxed{P = 76.6}$$

(9)
ID2



$$\frac{255-105}{2} = T$$

$$\frac{150}{2} = \boxed{T = 75^\circ}$$

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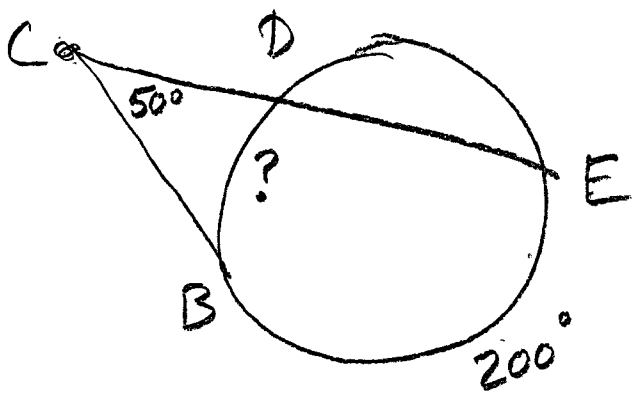
(11)
ID2



$$\frac{200-X}{2} = 50$$

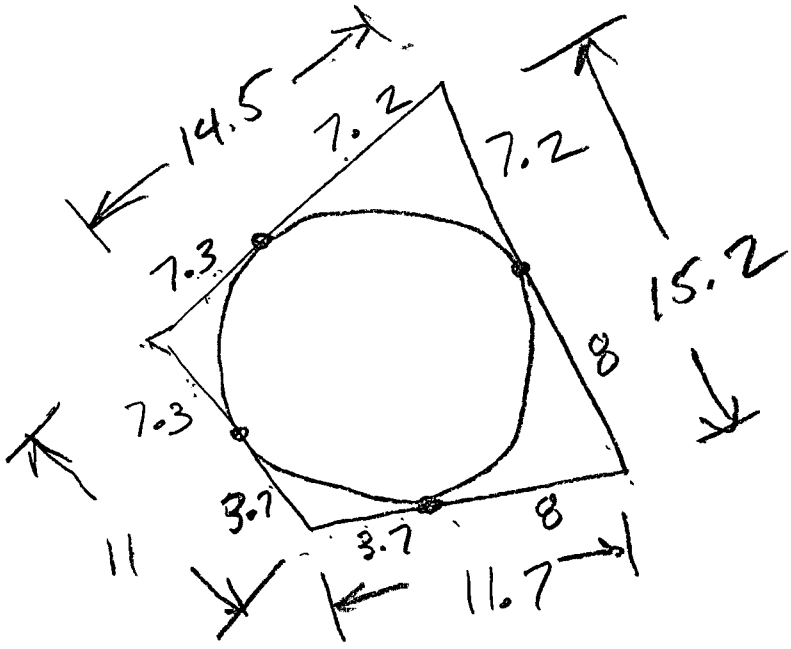
$$200 - X = 100$$
$$-200 \qquad -200$$

$$-X = -100$$

$$\boxed{X = 100^\circ}$$

(4)

ID3

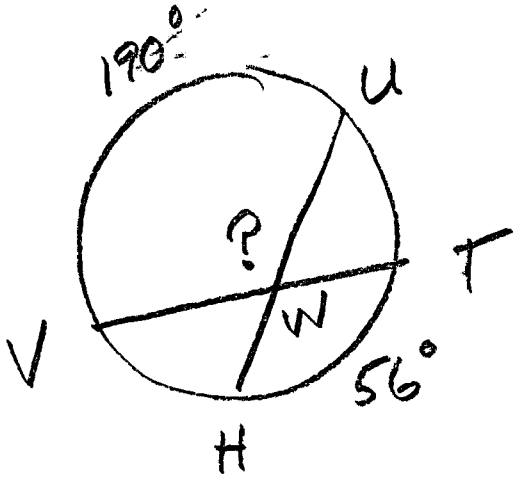


$P = 14.5$
11.0
11.7
15.2

$P = 52.4$

(6)

ID2

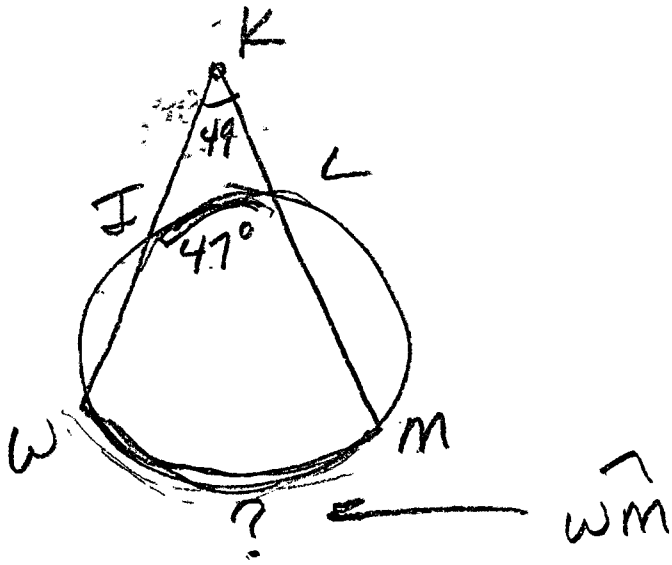


$$\frac{190+56}{2} = \angle VWU$$

$$\frac{246}{2} = \angle VWU$$

$$123^\circ = \angle VWU$$

(12)



$$\frac{\overset{\frown}{WM} - 47}{2} = 49 \cdot 2$$

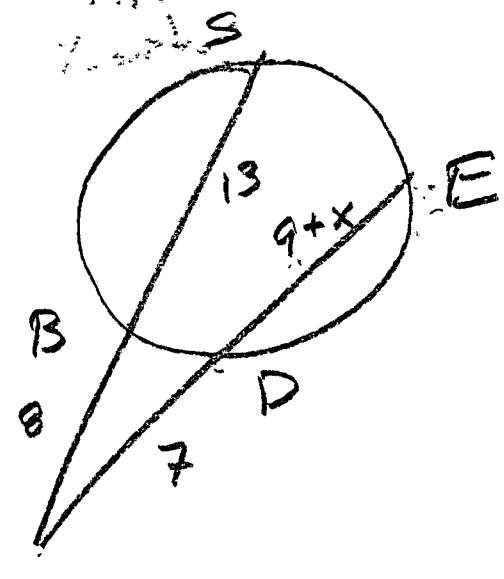
$$\overset{\frown}{WM} - 47 = 98$$

$$+47 \quad +47$$

$$\boxed{\overset{\frown}{WM} = 145^\circ}$$

(21) $\overline{ED}$

ID 2



$[(9+x)+7]\,7 = 21 \cdot 8$

$[x+16]\,7 = 168$

$7x + 112 = 168$

$-112 \quad -112$

$\frac{7x}{7} = \frac{56}{7}$

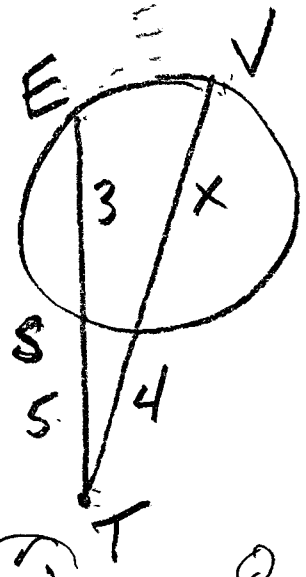
$x = 8$

$\overline{ED} = 9 + (8)$

$\overline{ED} = 17$

(22) $VT = ?$

IDK



$(4+x)4 = 8 \cdot 5$

$16 + 4x = 40$

$-16 \quad -16$

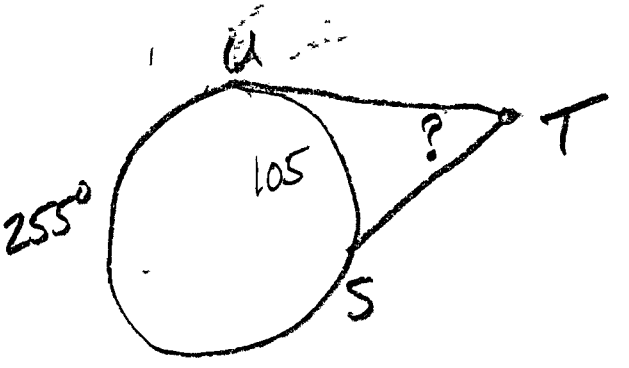
$\frac{4x}{4} = \frac{24}{4}$

$x = 6$

$VT = (6) + 4$

$VT = 10$

(9.) ID 2



255
−105
150

$\frac{255-105}{2} = T$

$\frac{150}{2} = \boxed{75^\circ = T}$

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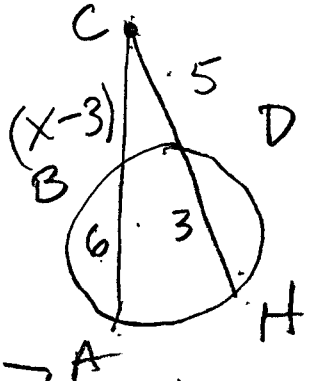
(25) ID3 AC = ?



$[(X-3)+6](X-3) = 8 \cdot 5$

$(X+3)(X-3) = 40$

$X^2 \cancel{-3X+3X} - 9 = 40$

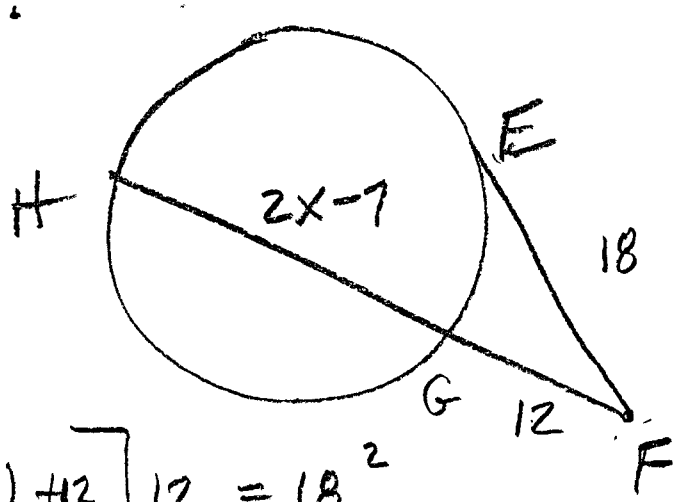
$X^2 = 49$

$X = \pm 7, 7, \cancel{-7}$

$AC = [(7)-3]+6$

$\boxed{\overline{AC} = 10}$

(24) FH = ?



$[(2x-7)+12]\,12 = 18^2$

$(2x+5)\,12 = 324$

$24x + 60 = 324$

$-60 \quad -60$

$\frac{24x}{24} = \frac{264}{24}$

$x = 11$

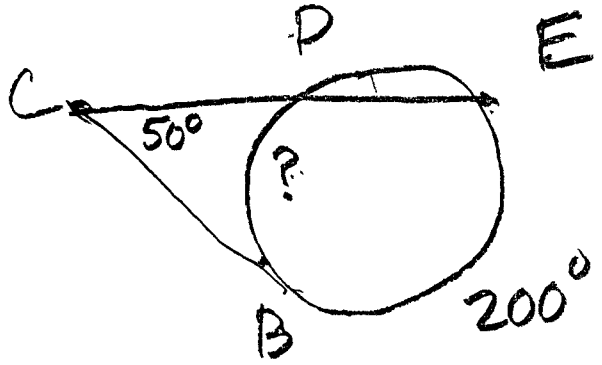
$FH = (2x-7) + 12$

$= (2(11)-7) + 12$

$= 15 + 12$

$FH = 27$

(11) ID2



$$\frac{200 - x}{2} = 50$$

$$200 - x = 100$$
$$-200 \quad -200$$
$$-x = -100$$

$$\boxed{x = 100^\circ}$$

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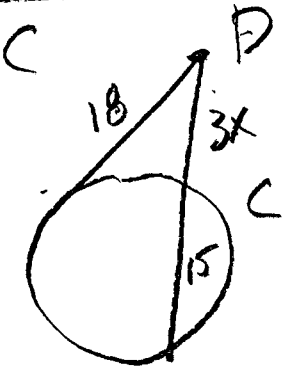
(25) ID1



$$(3x+15)\,3x = 18^2$$

$$9x^2 + 45x = 324$$

$$9x^2 + 45x - 324 = 0$$

$$9(x^2 + 5x - 36) = 0$$

$a = 1$
$b = 5$
$c = -36$

$b^2 - 4ac$
$(5)^2 - 4(1)(-36)$
$25 + 144 = 169 = d$

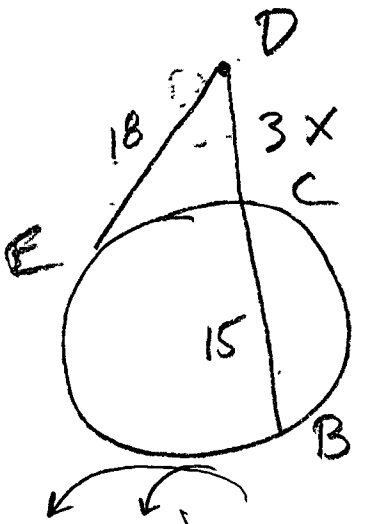
$$x = \frac{-b \pm \sqrt{d}}{2a} = \frac{-5 \pm 13}{2}$$

$x = \{4, -9\}$

$$\boxed{DC = 3(4) = 12}$$

(25)

ID 1



DC = ?

$(15+3x)\,3x = 324$

$45x + 9x^2 = 324$

$9x^2 + 45x - 324 = 0$

$9(x^2 + 5x - 36) = 0$

$a = 1$

$b = 5$

$c = -36$

$b^2 - 4ac$

$(5)^2 - 4(1)(-36)$

$25 + 144 = 169 = d$

$x = \frac{-b \pm \sqrt{d}}{2a} = \frac{-5 \pm 13}{2}$

$x = \{4, -9\}$

$DC = 3x$

$DC = 3(4)$

$DC = 12$