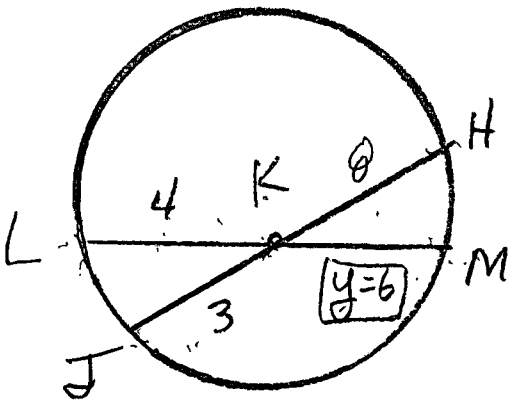
Geometry Weds. 1-23-13 CLASS NOTES

Homework Review

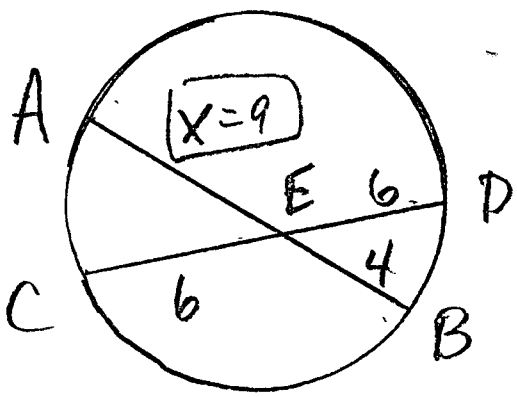
(2)



$4y = 24$

$y = 6$ $\quad \overline{LM} = 10$ $\quad \overline{JH} = 11$

(3)

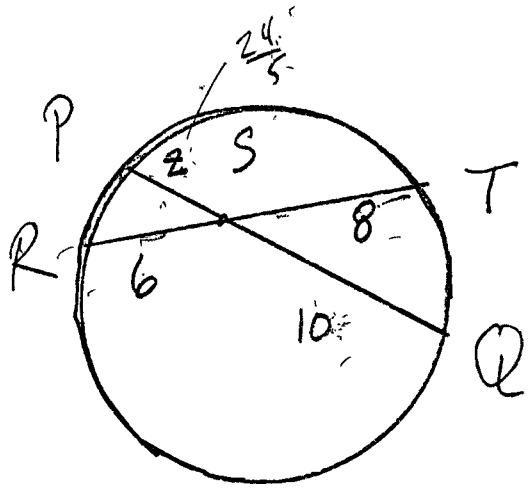


$4x = 6 \cdot 6$

$4x = 36$

$x = 9$ $\quad \overline{AB} = 13$ $\quad \overline{CD} = 12$

(4)



$\frac{24}{5} + \frac{10}{1}$

$\frac{24}{5} + \frac{50}{5}$

$\frac{10z}{10} = \frac{48}{10}$

$z = \frac{24}{5}$

$\overline{RT} = 14$

$\overline{PQ} = \frac{74}{5}$

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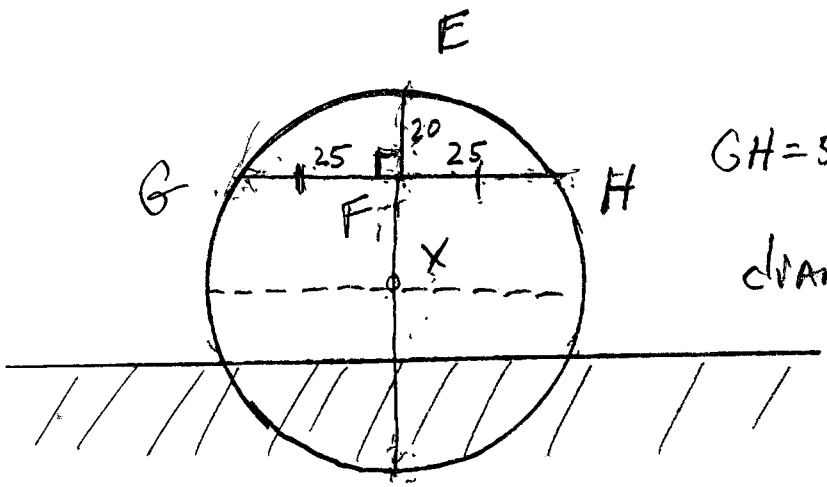
(5)



GH = 50 ft

diameter = ?

$25 \cdot 25 = 20x$

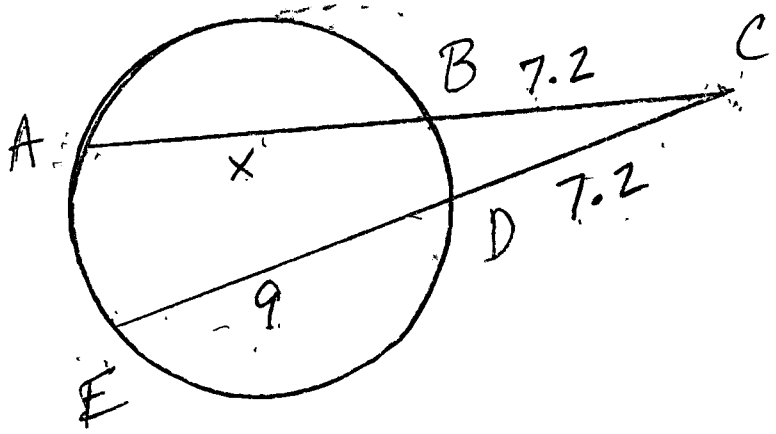
$\frac{625}{20} = \frac{20x}{20}$

$31.25 = \frac{125}{4} = x$

ADD 20

$\therefore$ diameter = 51.25 ft

(6)



$$* \Rightarrow \frac{(7.2+x)\,7.2}{7.2} = \frac{16.2 \cdot 7.2}{7.2}$$

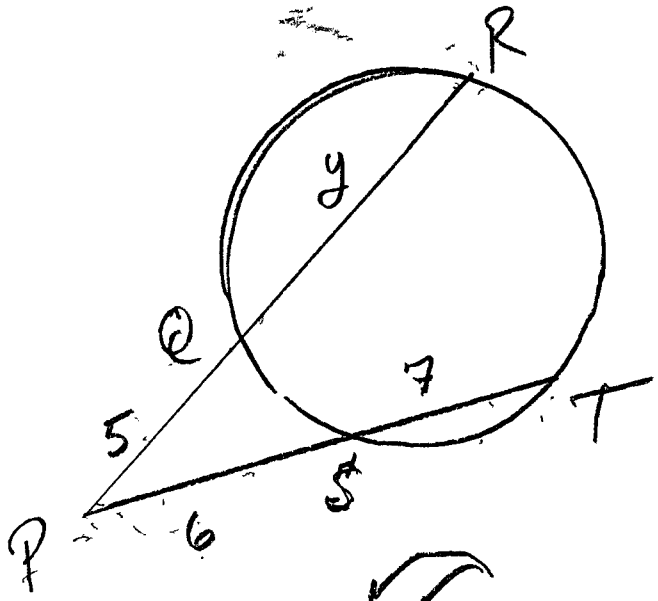
$$7.2 + x = 16.2$$
$$-7.2 \quad\quad -7.2$$

$$x = 9.0$$

$\overline{AC} = 16.2$

$\overline{EC} = 16.2$

(7)



$(5+y)5 = 13 \cdot 6$

$25 + 5y = 78$

$-25 \quad -25$

$5y = 53$

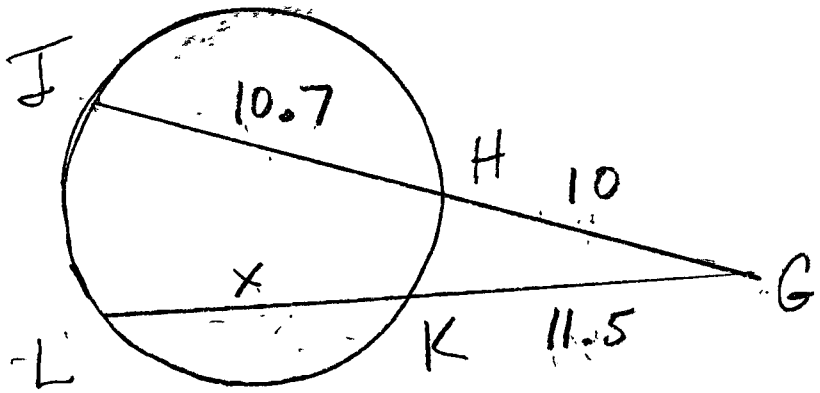
$y = \frac{53}{5}$

$\frac{53}{5} + \frac{25}{5}$

$\overline{PR} = \frac{78}{5}$

$\overline{PT} = 13$

(8)



$(11.5+x)11.5 = 20.7(10)$

$132.25 + 11.5x = 207.00$

$-132.25 \quad -132.25$

$\frac{11.5x}{11.5} = \frac{74.75}{11.5}$

$x = 6.5$

$\overline{JG} = 20.7$

$\overline{LG} = 18$

115
× 15
575
115
1725
132.25

00 6.5
11.5 | 74.75000
690
575
575
0

Solve using QF

$$3x^2 + 8x = 3$$

$$3x^2 + 8x - 3 = 0$$

$a = 3$ $\quad b^2 - 4ac$

$b = 8$ $\quad (8)^2 - 4(3)(-3)$

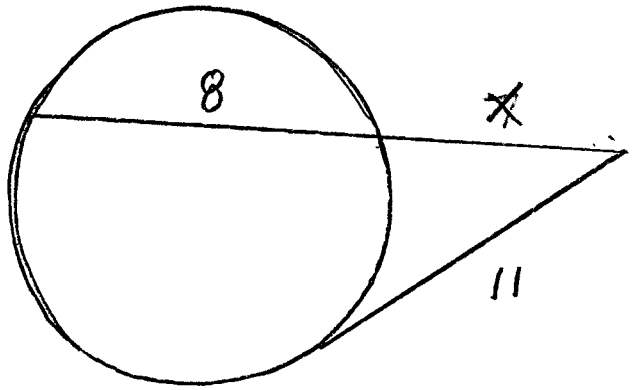
$c = -3$ $\quad 64 + 36 = \boxed{100 = d}$

$$X = \frac{-b \pm \sqrt{d}}{2a} = \frac{-8 \pm 10}{6}$$

$$= \left\{ \frac{1}{3}, -3 \right\}$$

CK? ? ?

(EX) Secant-Tangent Product w/ Quadratic Equation Solution Required



$$(8+x)x = 11^2$$

$$8x + x^2 = 121$$

$$x^2 + 8x - 121 = 0$$

$a = 1$

$b = 8$

$c = -121$

$b^2 - 4ac$

$(8)^2 - 4((1)(-121)$

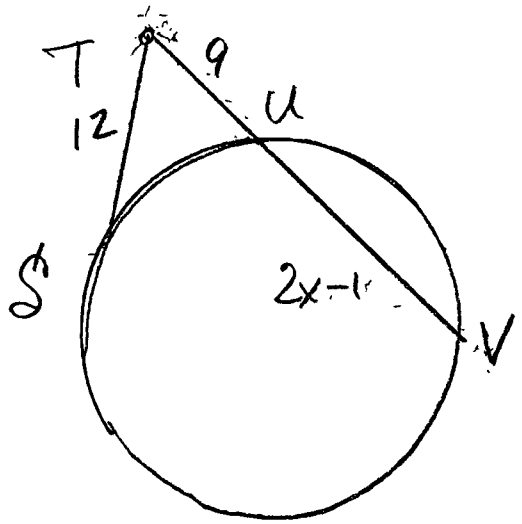
$64 + 484 = 548 = d$

$$x = \frac{-b \pm \sqrt{d}}{2a} = \frac{-8 \pm \sqrt{548}}{2}$$

$$\left\{ \frac{-8+\sqrt{548}}{2}, \frac{-8-\sqrt{548}}{2} \right\}$$

Worksheet Practice

(22)



Find $\overline{TV}$

$$[9+(2x-1)]\,9 = 12^2$$

$$[2x+8]\,9 = 144$$

$$18x+72 = 144$$

$$-72 \quad -72$$

$$\frac{18x}{18} = \frac{72}{18}$$

$$x = 4$$

$\therefore \overline{UV} = 2(4) - 1 = 7$

$\overline{TV} = 16$ ✓