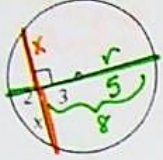


Chord-Chord
 $(part)(part) = (part)(part)$

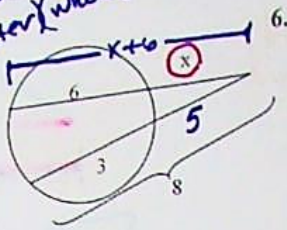


$$x^2 = 2(8)$$

$$\sqrt{x^2} = \sqrt{16}$$

$$x = 4$$

Secant-Secant
 $(outer)(whole) = (outer)(whole)$



$$x(x+6) = 5(8)$$

$$x^2 + 6x = 40$$

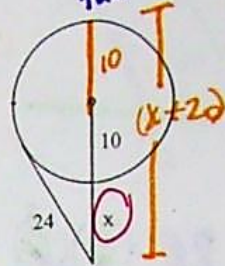
$$x^2 + 6x - 40 = 0$$

$$(x + 10)(x - 4) = 0$$

$$x = \{-10, 4\}$$

$$x = 4$$

Tangent-Secant
 $tan^2 = (outer)(whole)$



$$x(x+20) = 24^2$$

$$x^2 + 20x = 576$$

$$x^2 + 20x - 576 = 0$$

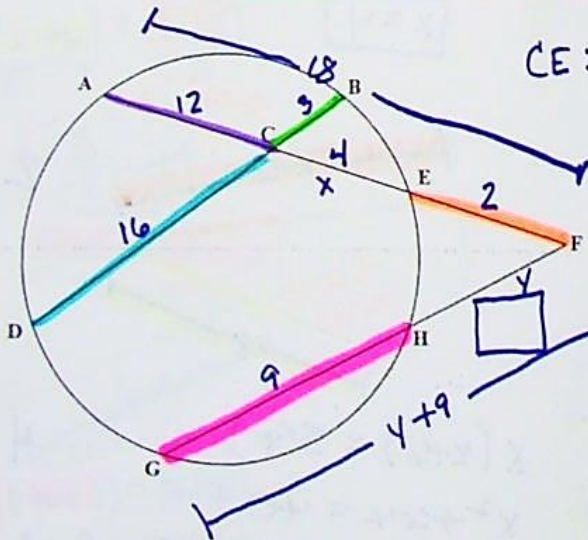
$$(x + 36)(x - 16) = 0$$

$$x = \{-36, 16\}$$

$$x = 16$$

AT=4
 TO=2
 AB=9
 Find GT.

7. Given: AC = 12, BC = 3, DC = 16, HG = 9, and EF = 2. Find FH.



CE: $12x = 3(18)$

$$12x = 54$$

$$\frac{12x}{12} = \frac{54}{12}$$

$$x = 4.5$$

FH: $y(y+9) = 2(18)$

$$y^2 + 9y = 36$$

$$y^2 + 9y - 36 = 0$$

$$(y + 12)(y - 3) = 0$$

$$y = \{-12, 3\}$$

$$y = 3$$

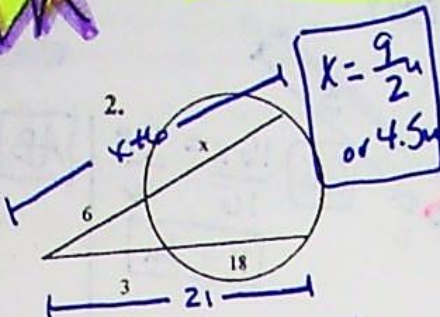
Geometry: 10.8 **POWER** theorems (Feel the power....)

Find x.



$$6x = 4(12)$$

$$x = 8$$

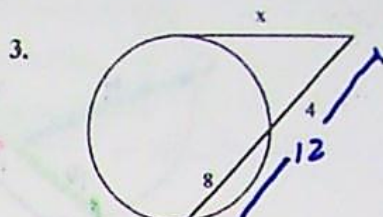


$$6(x+6) = 3(21)$$

$$6x + 36 = 63$$

$$6x = 27$$

$$x = \frac{9}{2} \text{ or } 4.5$$

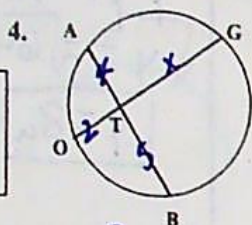


$$x^2 = 4(12)$$

$$\sqrt{x^2} = \sqrt{16 \cdot 3}$$

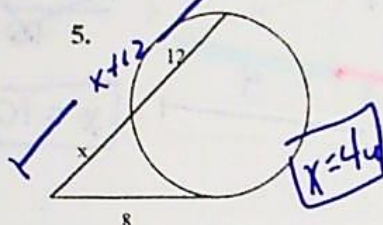
$$x = 4\sqrt{3}$$

AT = 4
TO = 2
AB = 9
Find GT.



$$2x = 4(5)$$

$$x = 10$$



$$x(x+12) = 8^2$$

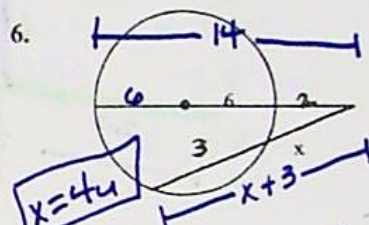
$$x^2 + 12x = 64$$

$$x^2 + 12x - 64 = 0$$

$$(x+16)(x-4) = 0$$

$$x = \{-16, 4\}$$

$$x = 4$$



$$x(x+3) = 2(14)$$

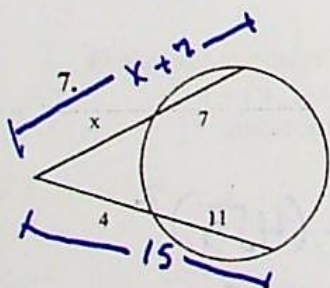
$$x^2 + 3x = 28$$

$$x^2 + 3x - 28 = 0$$

$$(x+7)(x-4) = 0$$

$$x = \{-7, 4\}$$

$$x = 4$$



$$x(x+7) = 4(15)$$

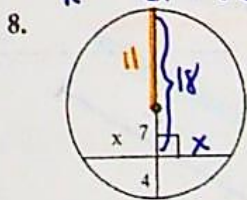
$$x^2 + 7x = 60$$

$$x^2 + 7x - 60 = 0$$

$$(x+12)(x-5) = 0$$

$$x = \{-12, 5\}$$

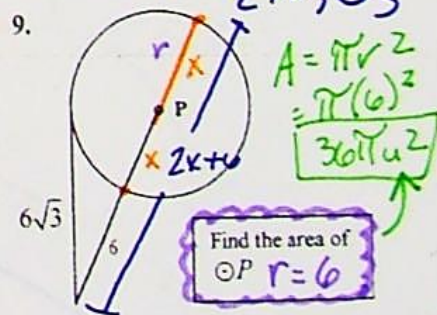
$$x = 5$$



$$x^2 = (4)(18)$$

$$\sqrt{x^2} = \sqrt{72} = 6\sqrt{2}$$

$$x = 6\sqrt{2}$$



Find the area of $\odot P$ $r=6$

$$6(2x+6) = (6\sqrt{3})^2$$

$$12x+36 = 36 \cdot 3$$

$$12x+36 = 108-36$$

$$12x = 72$$

$$x = 6$$