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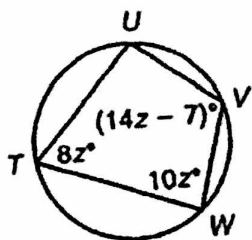
key (answers)

Date:

Period:

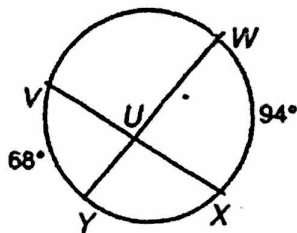
HW #10-10: Test Review

1. Find the measure of each angle in quadrilateral TUVW.



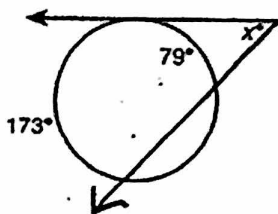
$$\begin{aligned} m\angle T &= 68^\circ \\ m\angle V &= 112^\circ \\ m\angle W &= 85^\circ \\ m\angle U &= 95^\circ \end{aligned}$$

2. Find $m\angle YUX$.



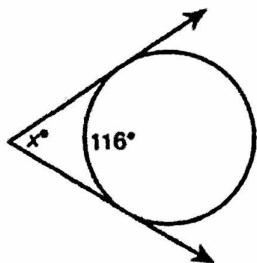
$$m\angle YUX = 99^\circ$$

3. Find the value of x .



$$x = 47$$

4. Find the value of x , the angle measure formed by the tangent lines.



$$x = 64$$

5. Solve the system of equations.

$$x^2 + y^2 = 34$$

$$x + y = 8$$

$$\begin{aligned} x &= 3, y = 5 \\ \text{or} \\ x &= 5, y = 3 \end{aligned}$$

6. Write the standard equation of the circle:

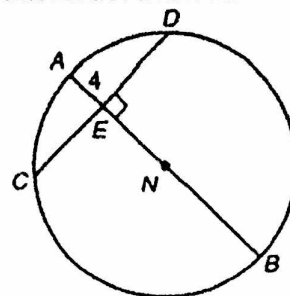
$$x^2 + 10x + y^2 - 12y = -10$$

$$(x+5)^2 + (y-6)^2 = 51$$

7. Write the standard equation of a circle that is tangent to the x -axis and has a center located at $(7, 4)$.

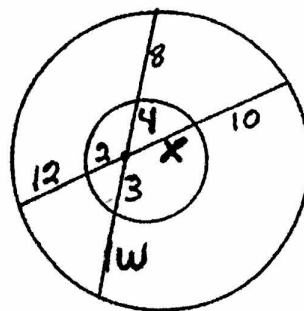
$$(x-7)^2 + (y-4)^2 = 16$$

8. If $CD = 18$ and $AE = 4$, find the radius of the circle. Exact answer.



$$r = 12.125$$

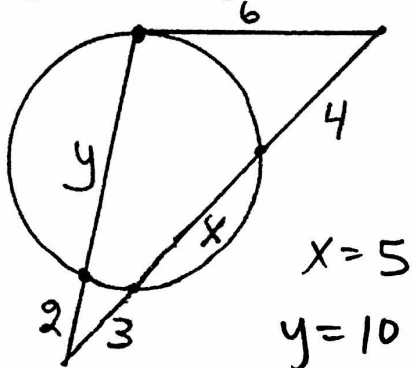
9. Find the values of x and w . Exact answers.



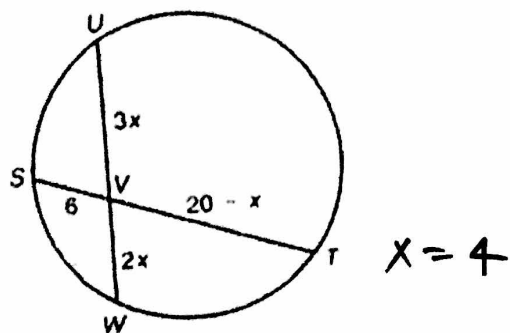
$$x = 6$$

$$w = \frac{47}{3}$$

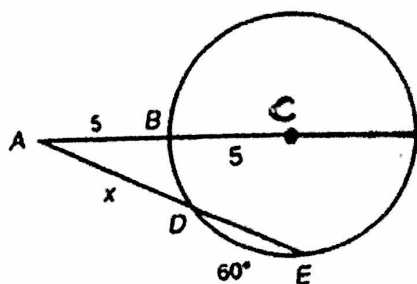
10. Find the values of x and y . The segment with length of 6 is a tangent.



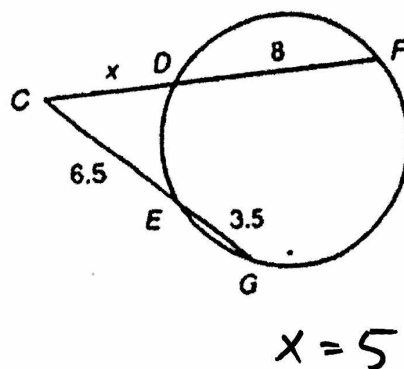
14. Solve for x .



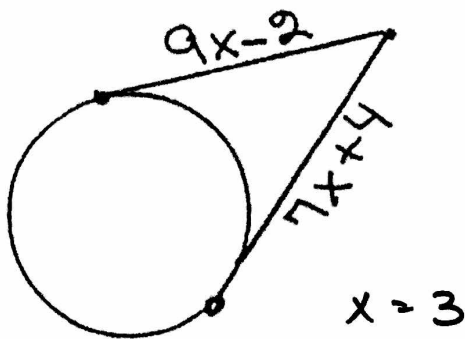
11. Find x to the nearest hundredth.



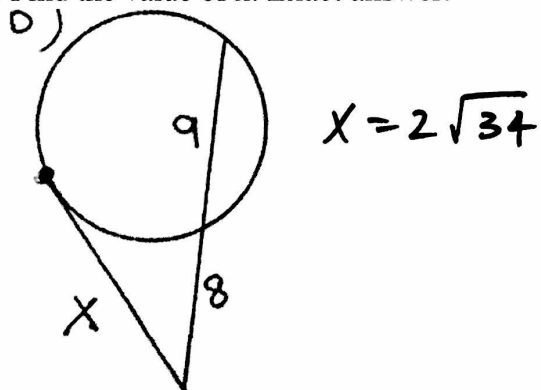
15. Solve for x .



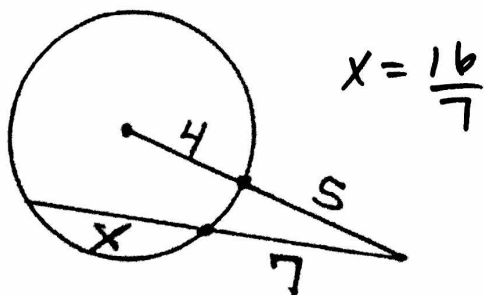
16. Solve for x .



12. Find the value of x . Exact answer.



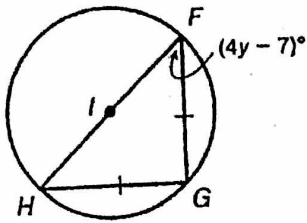
13. Find the value of x . Exact answer.



17. Find $m\angle FGI$ and $m\widehat{GH}$.



18. Find the value of y .



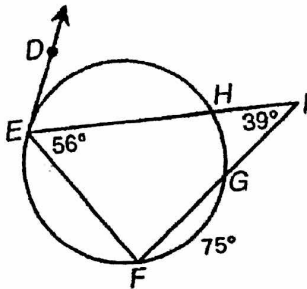
$$y = 13$$

22. Identify the center of the circle and the length if its radius: $(x + 3)^2 + (y - 2)^2 = 256$

center: $(-3, 2)$

radius = 16

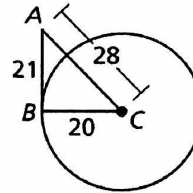
19. Find $m\angle DEI$ and $m\widehat{EF}$.



$$m\angle DEI = 66.5^\circ$$

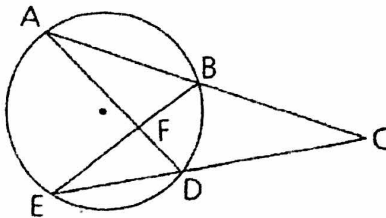
$$m\widehat{EF} = 115^\circ$$

23. Is $\overline{AB}$ a tangent segment? Justify your answer.



$\overline{AB}$ is NOT a tangent.

20. Given $m\angle AFE = 89^\circ$ and $m\angle C = 15^\circ$, find $m\widehat{AE}$ and $m\widehat{BD}$.



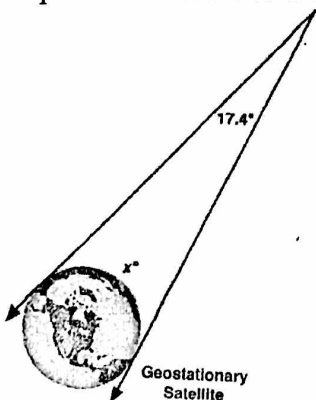
$$x = 74$$

$$y = 104$$

24. Two circles with radii 4 and 12 have centers 34 units apart. Find the length of a common internal tangent. Draw a diagram.

30 units

21. A geostationary satellite is about 35,800 km above the earth. How many arc degrees of the planet is visible to a camera on the satellite?



$$162.6^\circ$$