

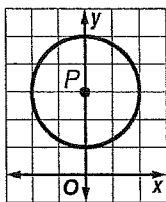
Circle Practice Test 2017

Multiple Choice

Identify the choice that best completes the statement or answers the question.

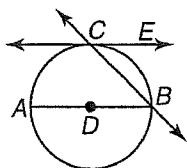
- _____ 1. Find the center of the circle whose equation is $(x + 11)^2 + (y - 7)^2 = 121$.
- | | |
|---------------|----------------|
| a. $(-11, 7)$ | c. $(121, 49)$ |
| b. $(11, -7)$ | d. 11 |

- _____ 2. Find the equation of $\odot P$.



- | | |
|----------------------------|--------------------------|
| a. $x^2 + (y - 3)^2 = 4$. | c. $(x - 3)^2 + y^2 = 2$ |
| b. $x^2 + (y - 3)^2 = 2$. | d. $(x - 3)^2 + y^2 = 4$ |

Use $\odot D$.



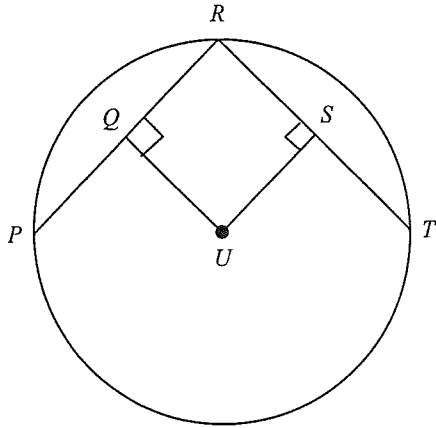
- _____ 3. Name a radius.
- | | |
|--------------------|------------------------------|
| a. \overline{AB} | c. \overline{CB} |
| b. \overline{DB} | d. \overleftrightarrow{CE} |

- _____ 4. Name a tangent.
- | | |
|--------------------|------------------------------|
| a. \overline{AB} | c. \overleftrightarrow{CB} |
| b. \overline{DB} | d. \overleftrightarrow{CE} |

Name: _____

ID: A

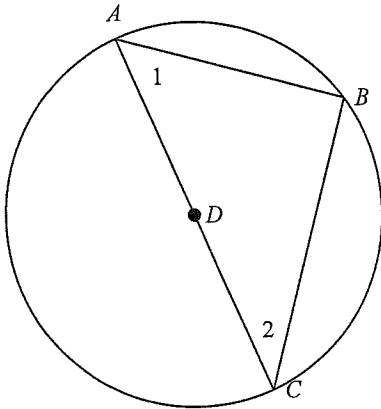
5. In $\odot U$, $TS = 15$, $UQ = US$. Find $m\overline{PR}$.



- a. 28
- b. 30

- c. 15
- d. 39

6.



If $m\angle 1 = 4x + 6$, $m\angle 2 = 8x$, find $m\angle 1$.

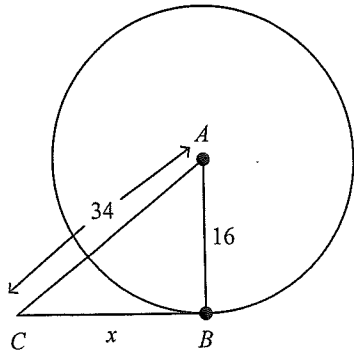
- a. 64
- b. 56

- c. 34
- d. 38

Name: _____

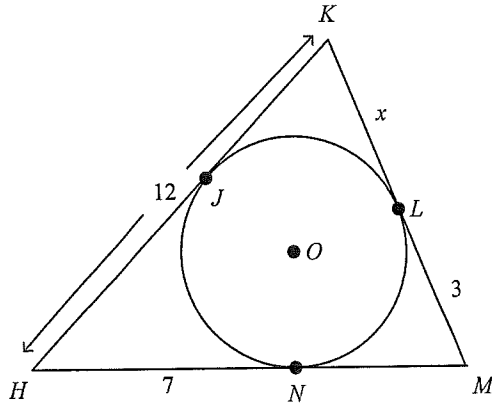
ID: A

7. Find x . Assume that segments that appear tangent are tangent.



- a. 30
- b. 17
- c. 46
- d. 23

8. Find x . Assume that segments that appear tangent are tangent.



- a. 7
- b. 5
- c. 9
- d. 3

9. Write an equation for a circle with center at $(-6, 10)$ and diameter 6.

- a. $(x + 6)^2 + (y - 10)^2 = 9$
- b. $(x + 6)^2 + (y - 10)^2 = 36$
- c. $(x - 6)^2 + (y + 10)^2 = 9$
- d. $(x - 6)^2 + (y + 10)^2 = 36$

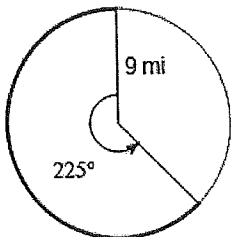
Short Answer

10. Given that the circumference is 28π km, find the exact area.

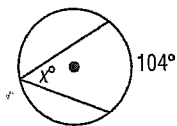
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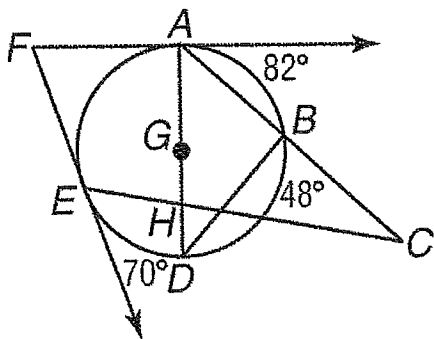
11. Find the arc length as an exact value.



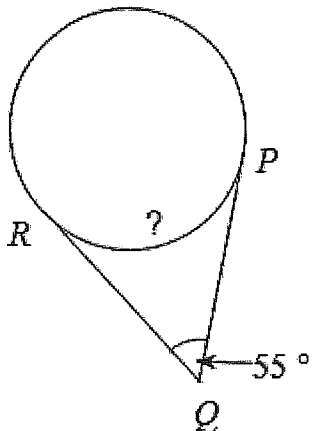
12. Find x .



13. Use $\odot G$ with \overrightarrow{FA} and \overrightarrow{FE} tangent at A and E . Find $m\angle AFE$.



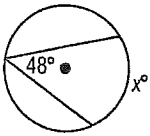
14. Find the measure of the arc.



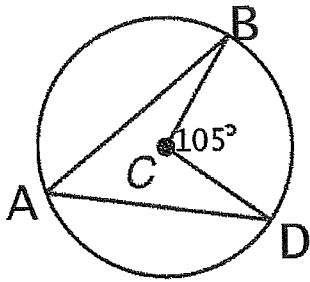
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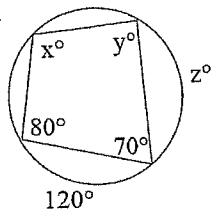
15. Find x .



16. Find $m\angle BAD$ and $m\widehat{BD}$.



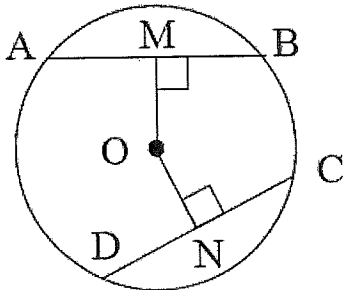
17. Find all variables.



120°

$x = \underline{\hspace{2cm}}$ $y = \underline{\hspace{2cm}}$ $z = \underline{\hspace{2cm}}$

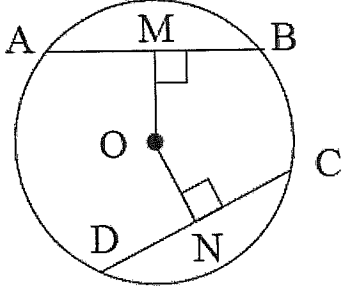
18. Find x if $AM = 4x - 5$ and $BM = -5x + 13$.



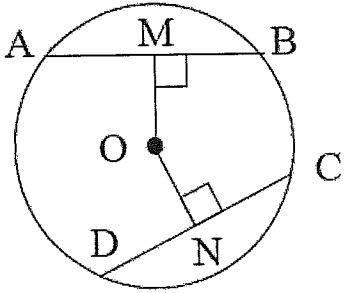
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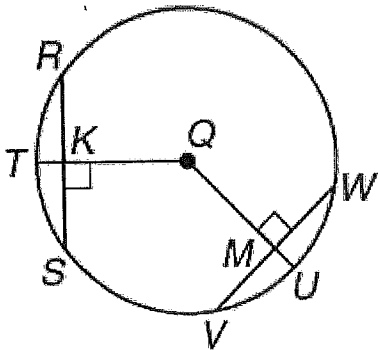
19. $AB = 18$, $OM = 12$, $ON = 12$, find CD .



20. Radius of circle O is 15m, $OM = 7m$, $ON = 7m$, find CD .



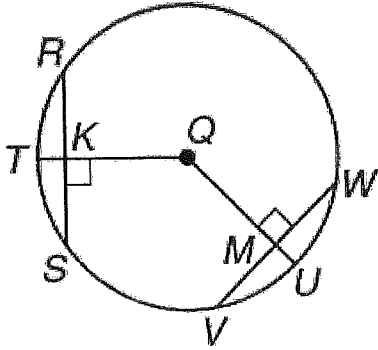
21. Find the radius QR of the circle if $QM = QK$, $WV = 40$ and $QK = 10$



Name: _____

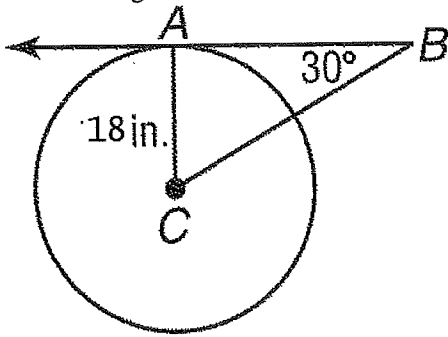
ID: A

22. Find $m\widehat{TR}$ and $m\widehat{SR}$ if $QM=QK$, $WV = 40$ and $QK = 10$



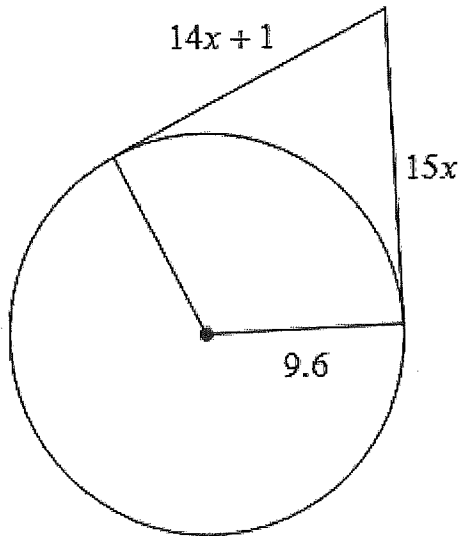
$m\widehat{TR} = \underline{\hspace{2cm}}$ $m\widehat{SR} = \underline{\hspace{2cm}}$

23. If \overline{AB} is tangent to $\odot C$ at A , find BC and AB . (Use exact values).



$BC = \underline{\hspace{2cm}}$ $AB = \underline{\hspace{2cm}}$

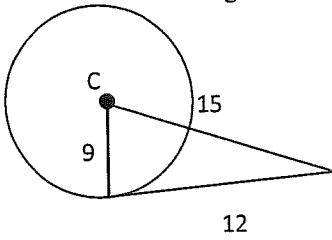
24. Find x .



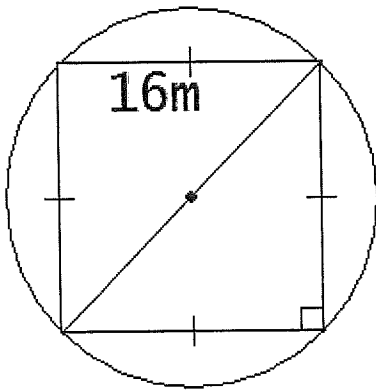
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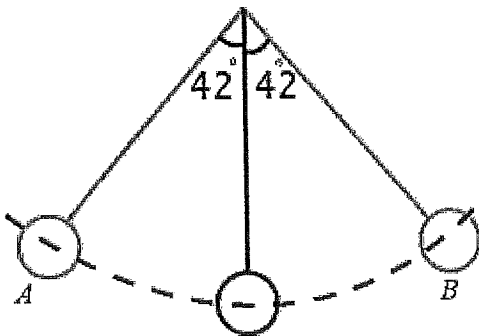
25. Determine if the segment of length 12 is tangent to the circle, explain your reasoning.



26. Find the exact circumference in terms of pi.



27. If a pendulum 25 centimeters long swings to an angle of 42° from its center on each side, then find the **arc length** from A to B . Round to the nearest hundredth. If you answer 84 degrees you are incorrect.

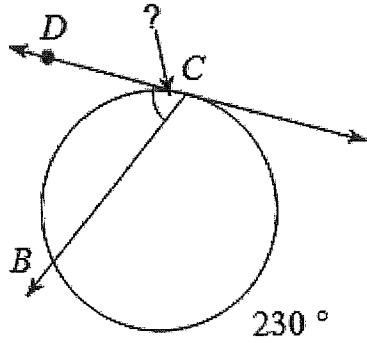


length of \widehat{AB} = _____

Name: _____

ID: A

28. Find $m\angle BCD$.



29. Find $m\angle RST$.

