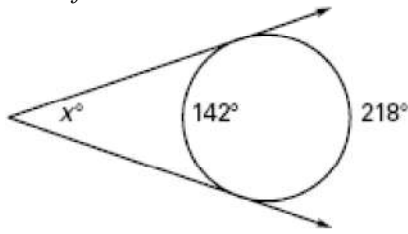


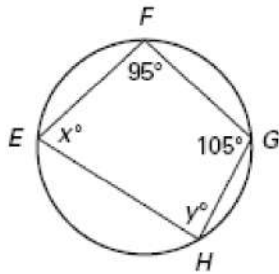
Honors Geometry Chapter 10 Quiz #2 Review (10-3 through 10-6)

1 Solve for x



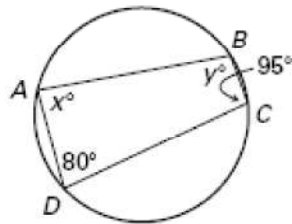
2 Solve for x and y

$m\widehat{HEF} = z^\circ$

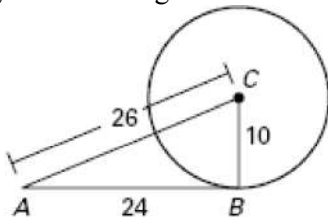


3 Solve for x and y

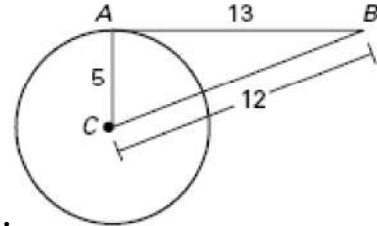
$m\widehat{ABC} = z^\circ$



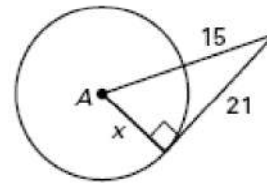
4 Determine whether \overline{AB} is tangent to $\odot C$. Explain your reasoning.



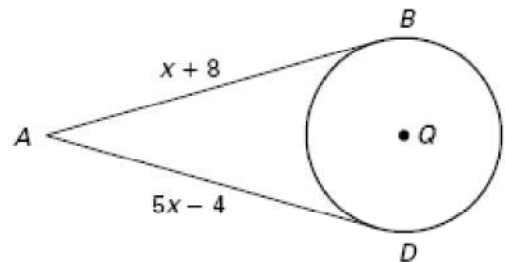
5 Determine whether \overline{AB} is tangent to $\odot C$. Explain your reasoning.



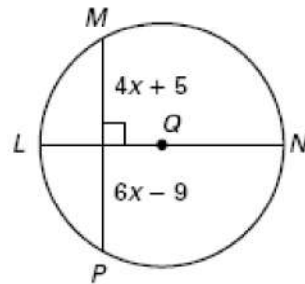
6 Find radius x of $\odot A$.



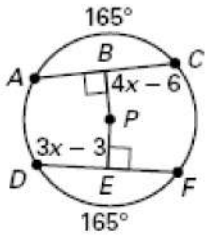
7 Find the value of x in $\odot Q$.



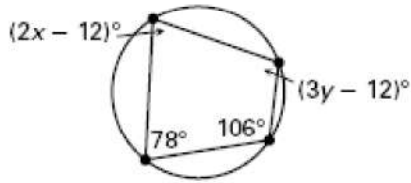
8 Find the value of x in $\odot Q$.



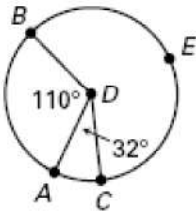
- 9 Find PB in $\odot P$.



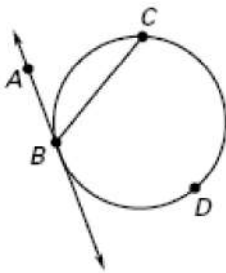
- 10 Find x and y .



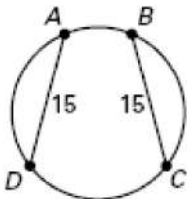
- 11 Find $m\widehat{BEC}$ in $\odot D$.



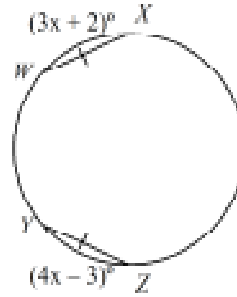
- 12 Find $m\widehat{CDB}$ given that \overleftrightarrow{AB} is tangent to the circle and $m\angle ABC = 57^\circ$.



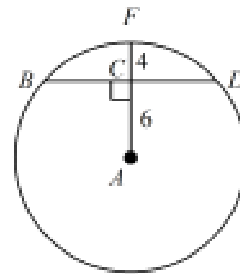
- 13 If $m\widehat{AB} = 42^\circ$ and $m\angle DC = 95^\circ$, find $m\widehat{BC}$.



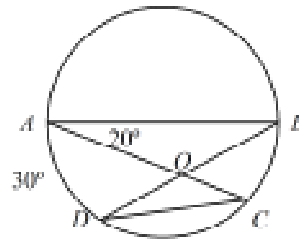
- 14 $\overline{WX} \cong \overline{YZ}$. Find $m\widehat{WX}$.



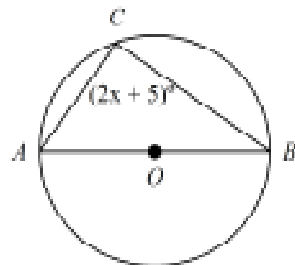
- 15 Find BD .



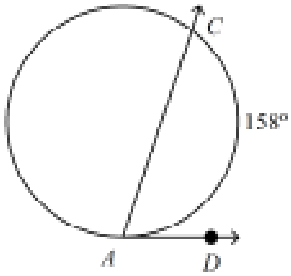
- 16 A wheel from a motor has springs arranged as in the figure. Find $m\angle DOC$.



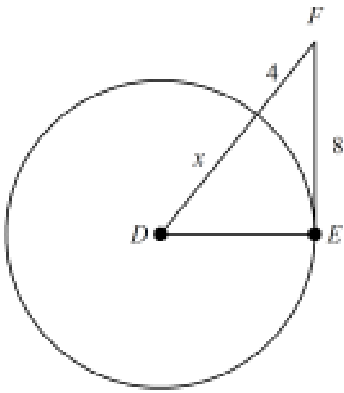
- 17 Solve for x .



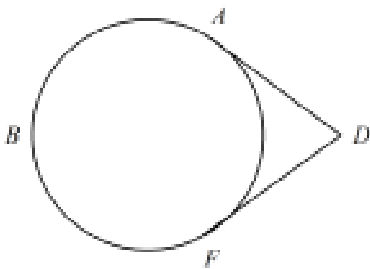
- 18 Find $m\angle CAD$.



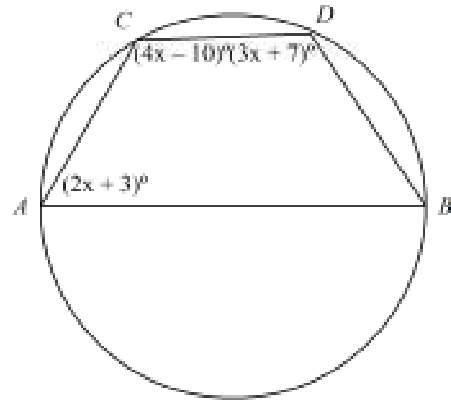
- 19 Find x . Assume that segments that appear tangent are tangent.



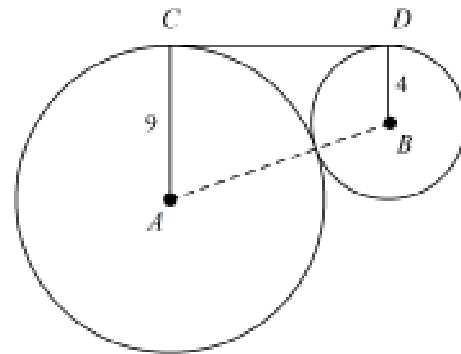
- 20 Two of the muscles that control eye movement are attached to the eyeball and intersect behind the eye as shown. If $m(\text{arc})ABF = 300^\circ$, what is $m\angle ADF$?



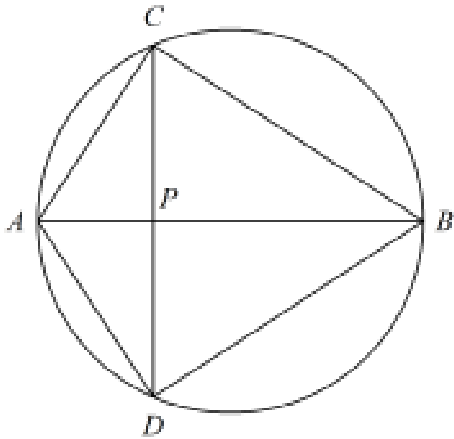
- 21 Find the angle measures of $ABCD$.



- 22 $\odot A$ has radius 9, $\odot B$ has radius 4, and \overline{CD} is a common tangent. What is \overline{CD} ? (Hint: Draw a perpendicular segment \overline{BE} from B to \overline{AC} .)

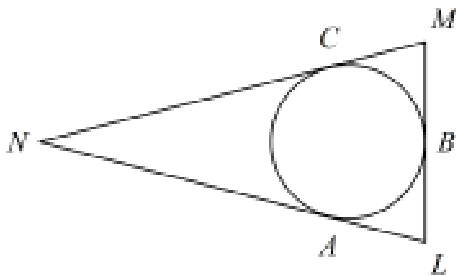


- 23** In problem 23 & 24, use the diagram. \overline{AB} is a diameter, and $\overline{AB} \perp \overline{CD}$. The figure is not drawn to scale.

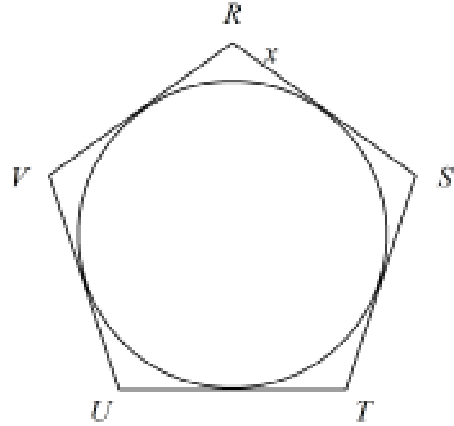


Which statement is NOT true?

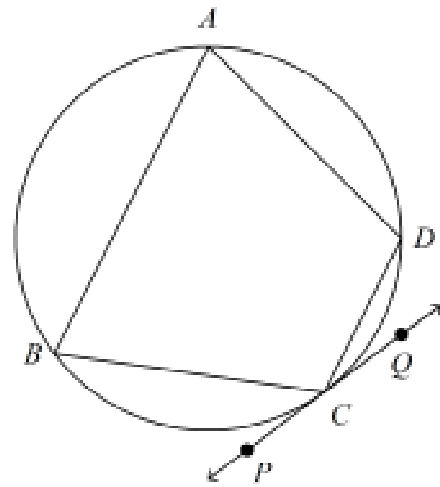
- A. $\widehat{AC} \cong \widehat{BD}$
 B. $\overline{AC} \cong \overline{AD}$
 C. $\angle BDA \cong \angle ACB$
 D. $m\angle PBC = m\angle DBA$
- 24** Find $m\widehat{BD}$ for $m\widehat{AC} = 59$.
 F. 121
 G. 149
 H. 118
 I. 31
- 25** In $\triangle NML$, $NL = NM$, and the perimeter is 52 cm. A , B , and C are points of tangency to the circle. $MC = 6$ cm. Find NL . Explain your reasoning. (The figure is not drawn to scale.)



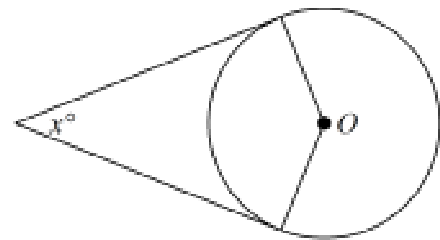
- 26** Pentagon $RSTUV$ is circumscribed about a circle. Solve for x for $RS = 10$, $ST = 13$, $TU = 11$, $UV = 12$, and $VR = 12$. The figure is not drawn to scale.



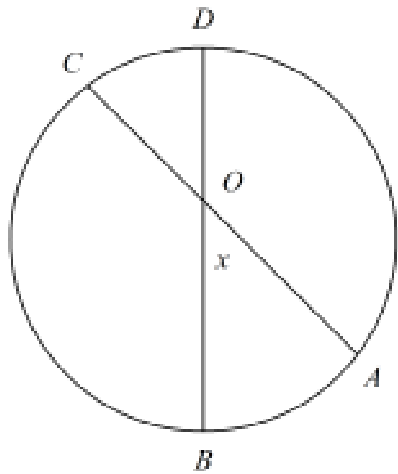
- 27** In the circle, $m\widehat{BC} = 98$. Find $m\angle BCP$. (The figure is not drawn to scale.)



- 28** Assume that lines that appear to be tangent are tangent. O is the center of the circle. Find the value of x .
 $m\angle O = 111$



- 29 Find the value of x for $m\widehat{AB} = 46$ and $m\widehat{CD} = 25$.
(The figure is not drawn to scale.)



Honors Geometry Chapter 10 Quiz #2 Review (10-3 through 10-6)

Answer Section

- 1 38
- 2 $x=75, y=85, z=210$
- 3 $x=85, y=100, z=160$
- 4 Yes, $24^2 + 10^2 = 26^2$; $\overline{BC} \perp \overline{AB}$
- 5 No, $5^2 + 13^2 \neq 12^2$; \overline{BC} is not $\perp \overline{AB}$
- 6 7.2
- 7 3
- 8 7
- 9 3
- 10 $x = 43, y = 38$
- 11 218°
- 12 246°
- 13 111.5°
- 14 $m\widehat{WX} = 17^\circ$
- 15 $BD = 16$
- 16 $m\angle DOC = 145^\circ$
- 17 $x = 42.5$
- 18 $m\angle CAD = 79^\circ$
- 19 6
- 20 $m\angle ADF = 120^\circ$
- 21 $m\angle A = 71^\circ$, $m\angle B = 54^\circ$, $m\angle C = 126^\circ$, and $m\angle D = 109^\circ$
- 22 $CD = 12$
- 23 A
- 24 F
- 25 $NM = NL$ and, by the Tangent Theorem, $NC = NA$. By subtraction, $MC = LA$. Also by the Tangent Theorem, $MC = MB$ and $LA = LB$, so $6 = MC = MB = LB = LA$. The perimeter is 52 cm, so $52 = NC + MC + MB + LB + LA + NA$. By substitution, $52 = NA + 6 + 6 + 6 + 6 + NA$, so $NA = 14$. Because $NL = NA + LA$, $NL = 14 \text{ cm} + 6 \text{ cm}$, or 20 cm.
- 26 4
- 27 49
- 28 69
- 29 35.5