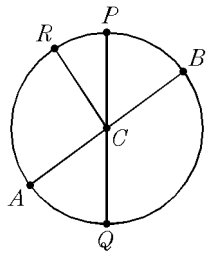
**Module 15-Circles Review**

**Name:** _____ **Date:** _____

1. For each of the following arcs, state whether it is a *major arc*, a *minor arc*, or a *semicircle* or *C*.



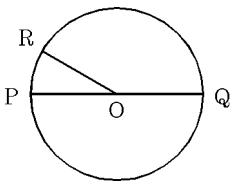

a) $\overset{\frown}{BRA}$

b) $\overset{\frown}{BQ}$

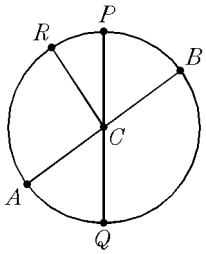
c) $\overset{\frown}{AR}$

d) $\overset{\frown}{BAR}$

2. Given the circle with center $O$ and with $m\angle ROQ = 160°$, find the measure of minor arc $\overset{\frown}{PR}$.




3. In circle $C$, $\overline{AB}$ and $\overline{PQ}$ are diameters, $m\angle BCP = 52$, and $m\angle ACR = 93$. Find the following measures.




a) $m\angle ACQ$

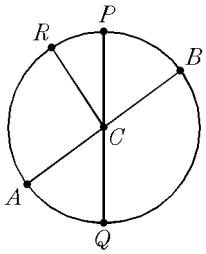
b) $m\angle BCQ$

c) $m\angle RCP$

d) $m\overset{\frown}{AQ}$

e) $m\overset{\frown}{ABR}$

4. In circle $C$, $\overline{AB}$ and $\overline{PQ}$ are diameters, $m\angle BCP = 49$, and $m\angle ACR = 92$. Find the following measures.




a) $m\overset{\frown}{ABR}$

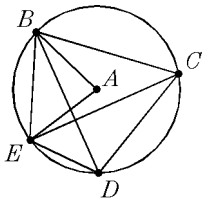
b) $m\overset{\frown}{AQ}$

c) $m\angle ACQ$

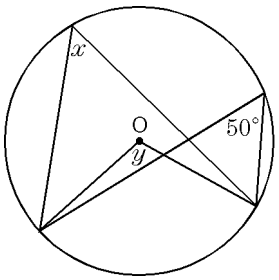
d) $m\angle RCP$

e) $m\angle BCQ$

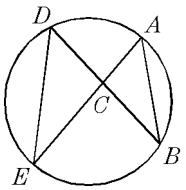
5. In circle $A$, $m\overset{\frown}{BE} = 84$. Find $m\angle BAE + m\angle BCE$.



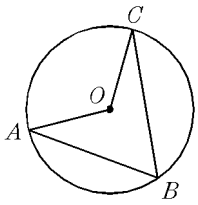

6. In the given diagram, $O$ is the center of the circle. Find the values of $x$ and $y$.



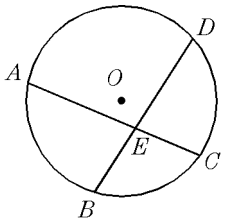

7. In the diagram, $m\angle CAB = 35$ and $m\angle ACB = 95$. What are the measures of angles $\angle EDC$ and $\angle DEC$, respectively?




8. In the diagram, $\overline{AO}$ and $\overline{OC}$ are radii of circle $O$ and $\overline{AB}$ and $\overline{BC}$ are chords. If $m\angle ABC = 55$, what is the measure of central angle $\angle AOC$?

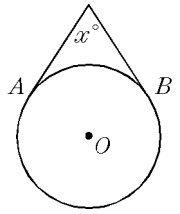



9. In the diagram, two chords of circle $O$, $\overline{AC}$ and $\overline{BD}$, intersect at $E$. $m\overset{\frown}{AB} = 88$ and $m\overset{\frown}{DC} = 62$. What is the measure of $\angle AEB$?

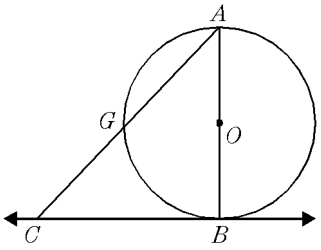



10. In the diagram, two chords of circle $O$, $\overline{AC}$ and $\overline{BD}$, intersect at $E$. $m\angle AEB = 80$ and $m\overset{\frown}{CD} = 94$. What is the measure of $\overset{\frown}{AB}$?

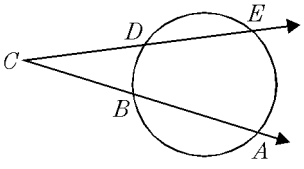
11. In the diagram, solve for $x$ if $m\widehat{AB} = 100$?



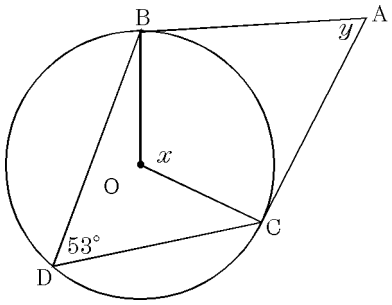

12. In the diagram, $\overleftrightarrow{BC}$ is a tangent to $\bigcirc O$ at point $B$ and $m\angle ACB = 42$. What is the measure of $\widehat{BG}$?



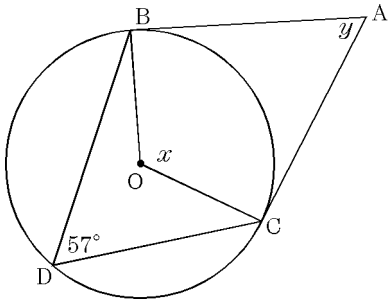

13. In the diagram, $m\widehat{DB} = 32$ and $m\widehat{EA} = 88$. What is the measure of $\angle ECA$?




14. Find $x$ and $y$.




15. Find $x$ and $y$.



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Module 15-Circles Review 10/17/2019

1.
Answer: semicircle; minor; minor; major
Points: 1

2.
Answer: $20^\circ$
Points: 1

3.
Answer: 52; 128; 35; 52; 267
Points: 1

4.
Answer: 268; 49; 49; 39; 131
Points: 1

5.
Answer: 126
Points: 1

6.
Answer: $x = 50^\circ$, $y = 100^\circ$
Points: 1

7.
Answer: $35^\circ$, $60^\circ$
Points: 1

8.
Answer: $110^\circ$
Points: 1

9.
Answer: $75^\circ$
Points: 1

10.
Answer: $66^\circ$
Points: 1

11.
Answer: $80^\circ$
Points: 1

12.
Answer: $96^\circ$
Points: 1

13.
Answer: $28^\circ$
Points: 1

14.
Answer: $x = 106^\circ$, $y = 74^\circ$
Points: 1

15.
Answer: $x = 114^\circ$, $y = 66^\circ$
Points: 1