Name: _____ **Class:** _____ **Date:** _____ **ID: A**

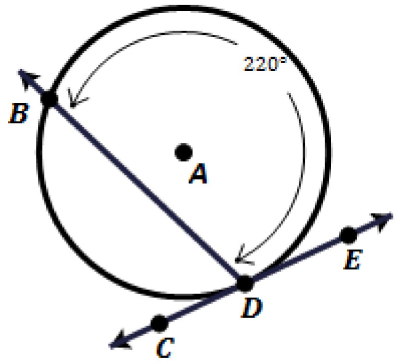
04-03-Sample Quiz-Angles of Circles

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

____ 1.

Based on the measures provided in the diagram and that line $\overleftrightarrow{CE}$ is tangent to the circle, determine the measure of $\angle EDB$.

(You may assume that point A is the center of the circle.)



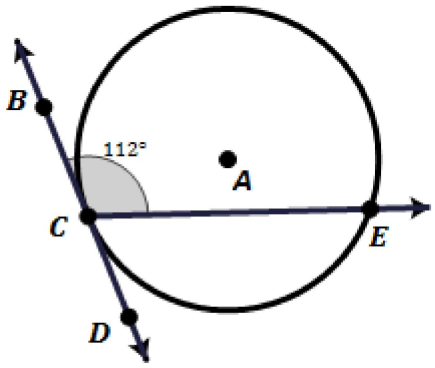
(Figure may not be drawn to scale.)

a. 70°
b. 110°
c. 120°
d. 140°

____ 2.

Given $m\angle BCE = 112°$ and that line $\overleftrightarrow{BD}$ is tangent to the circle, determine the measure of the minor arc $\overset{\frown}{CE}$.

(You may assume that point A is the center of the circle.)



(Figure may not be drawn to scale.)

a. 56°
b. 68°
c. 136°
d. 248°

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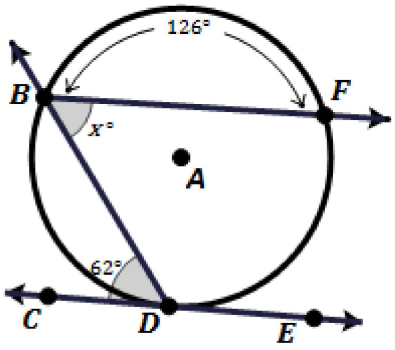
____ 3.

Given $m\overset{\frown}{BF} = 126°$, $m\angle CDB = 62°$, and that line $\overleftrightarrow{CE}$ is tangent to the circle, determine the measure of the angle $\angle FBD$.

(You may assume that point A is the center of the circle.)



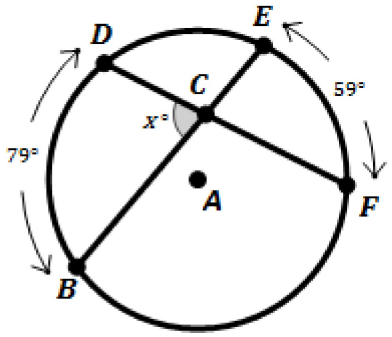
(Figure may not be drawn to scale.)

a. 55°
b. 62°
c. 64°
d. 92°

____ 4.

Given $m\overset{\frown}{DB} = 79°$ and $m\overset{\frown}{FE} = 59°$, determine the measure of the angle $\angle BCD$.

(You may assume that point A is the center of the circle.)



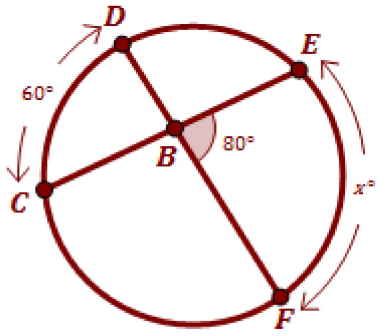
(Figure may not be drawn to scale.)

a. 39.5°
b. 69°
c. 70°
d. 108.5°

____ 5.

Given $m\overset{\frown}{CD} = 60°$ and $m\angle EBF = 80°$, determine the measure of the arc $m\overset{\frown}{FE}$.

(You may assume that point A is the center of the circle.)



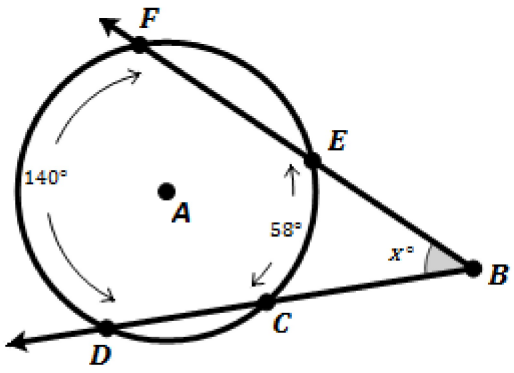
(Figure may not be drawn to scale.)

a. 70°
b. 90°
c. 95°
d. 100°

____ 6.

Given $m\overset{\frown}{FD} = 140°$ and $m\overset{\frown}{CE} = 58°$, determine the measure of the angle $\angle FBD$.

(You may assume that point A is the center of the circle.)



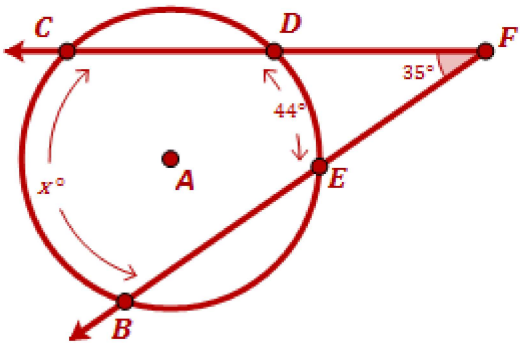
(Figure may not be drawn to scale.)

a. 41°
b. 44°
c. 58°
d. 111°

____ 7.

Given $m\overset{\frown}{ED} = 44°$ and $m\angle BFC = 35°$, determine the measure of the arc $m\overset{\frown}{BC}$.

(You may assume that point A is the center of the circle.)



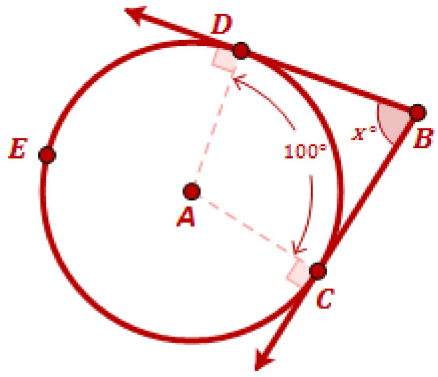
(Figure may not be drawn to scale.)

a. 79°
b. 99°
c. 114°
d. 123°

____ 8.

Given $m\overset{\frown}{CD} = 100°$, determine the measure of the angle $\angle DBC$.

(You may assume that point A is the center of the circle and that rays BD and BC are tangent to the circle.)



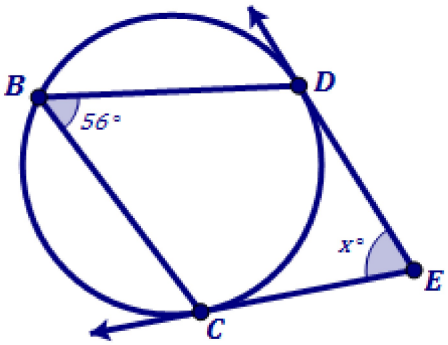
(Figure may not be drawn to scale.)

a. 50°
b. 70°
c. 75°
d. 80°

____ 9.

Given $m\angle DBC = 56°$, determine the measure of the angle $\angle DEC$.

(You may assume rays ED and EC are tangent to the circle.)

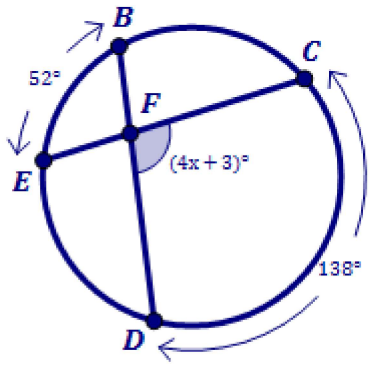


(Figure may not be drawn to scale.)

a. 56°
b. 64°
c. 68°
d. 72°

____ 10.

Given $m\angle CFD = (4x + 3)°$, $m\overset{\frown}{DC} = 138°$ and $m\overset{\frown}{FE} = 52°$, determine the most appropriate value for $\boldsymbol{x}$.



a. $x = 16.5$
b. $x = 23$
c. $x = 32$
d. $x = 33.75$