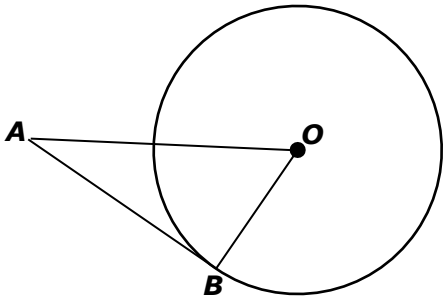
Name _____ Date _____

Angle Relationships in Circles

Evaluate – Answer Key

1 If $\overline{AB}$ is a tangent to $\odot O$ and $m\angle OAB = 32°$, what is $m\angle AOB$?



A 32°

B 58°

C 64°

D 90°

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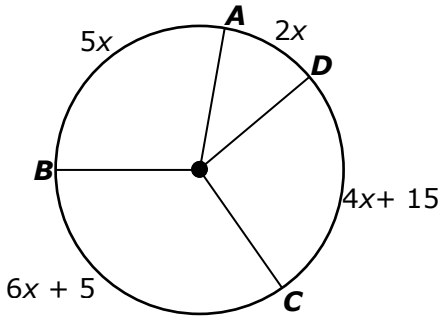
2 What is $m\overset{\frown}{DC}$?



A 40°

B 105°

C 95°

D 90°

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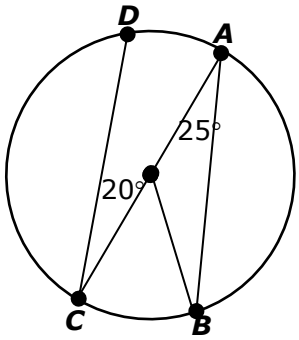
3 For circle O, arrange the arcs in order from shortest arc to longest arc.



A $\overset{\frown}{AD}, \overset{\frown}{BC}, \overset{\frown}{AB}, \overset{\frown}{CD}$

B $\overset{\frown}{BC}, \overset{\frown}{AD}, \overset{\frown}{AB}, \overset{\frown}{CD}$

C $\overset{\frown}{AD}, \overset{\frown}{BC}, \overset{\frown}{CD}, \overset{\frown}{AB}$

D $\overset{\frown}{BC}, \overset{\frown}{AD}, \overset{\frown}{CD}, \overset{\frown}{AB}$

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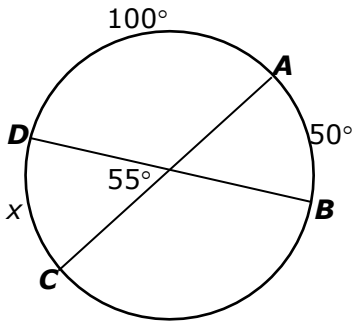
4 Which equation can be used to find $m\overset{\frown}{CD}$?



A $x = (50 + 55)$

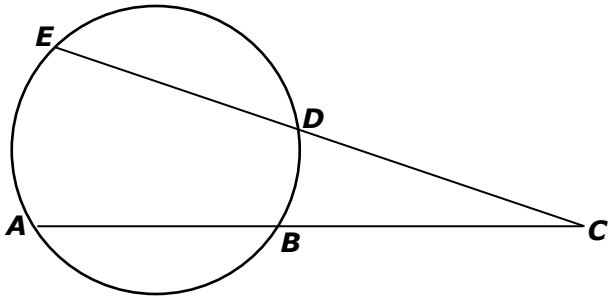
B $50 = \frac{1}{2}(x + 55)$

C $55 = \frac{1}{2}(x + 50)$

D $x = \frac{1}{2}(55 - 50)$

Name _____ Date _____

5 Which expression can be used to find $m\angle C$?



A $2(m\overset{\frown}{AE} - m\overset{\frown}{BD})$

B $2(m\overset{\frown}{AE} + m\overset{\frown}{BD})$

C $\dfrac{m\overset{\frown}{BD} - m\overset{\frown}{AE}}{2}$

D $\dfrac{m\overset{\frown}{AE} - m\overset{\frown}{BD}}{2}$

