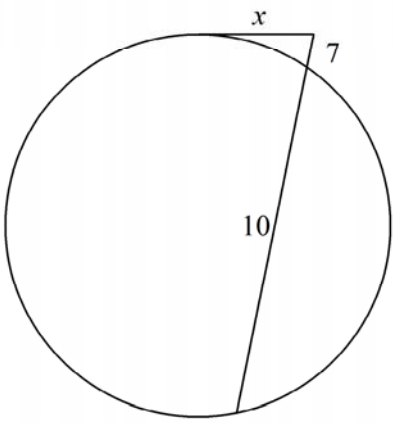
Name: _____ Class: _____ Date: _____ ID: A

Circles and Secants

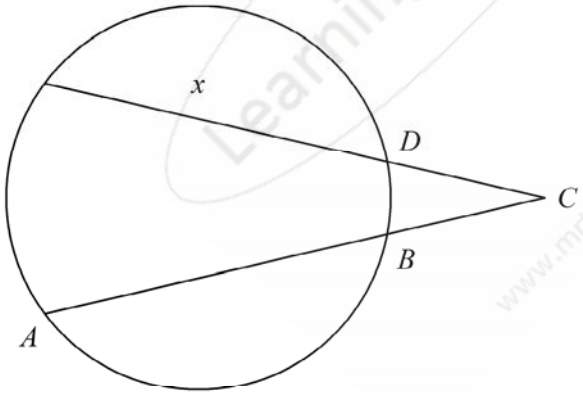
Find the value of x. If necessary, round your answer to the nearest tenth. The figures are not drawn to scale.

____ 1. The figure consists of a tangent and a secant to the circle.



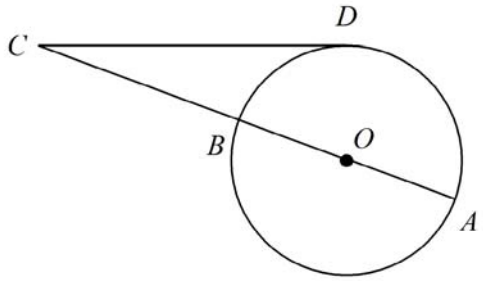
A. 119 B. 8.4 C. 10.9 D. 13

____ 2. $AB = 12$, $BC = 5$, and $CD = 7$



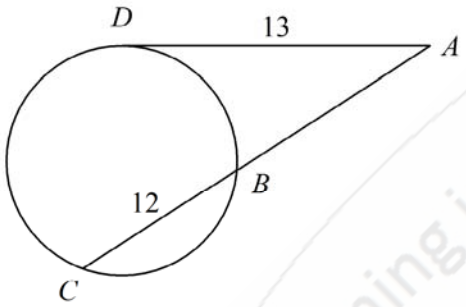
A. 5.14 B. 12.14 C. 8.57 D. 12

____ 3. $\overline{CD}$ is tangent to circle O at D. Find the diameter of the circle for $BC = 16$ and $DC = 30$. Round to the nearest tenth.
(The diagram is not drawn to scale.)



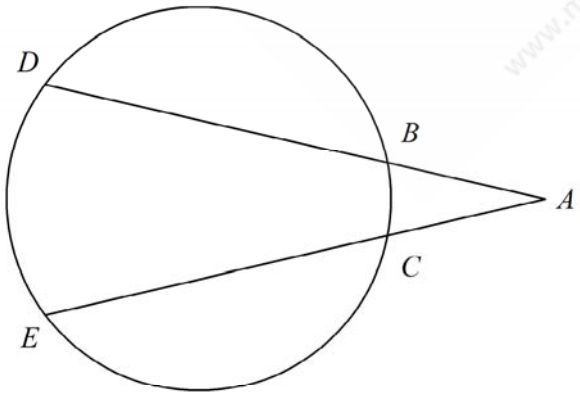
A. 14.1 B. 56.3 C. 40.3 D. 72.3

____ 4. $\overline{AD}$ is tangent to circle O at D. Find AB. Round to the nearest tenth if necessary.



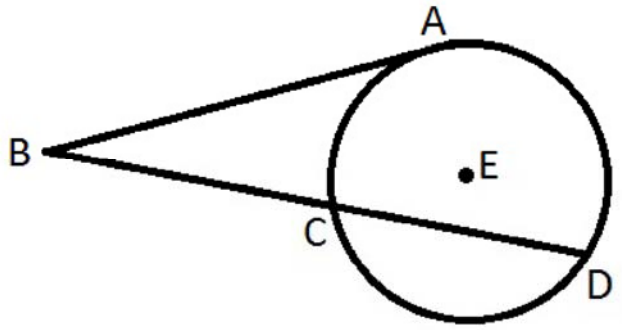
A. 2.2 B. 14.1 C. 8.3 D. 12.5

____ 5. $m\overset{\frown}{DE} = 128$ and $m\overset{\frown}{BC} = 49$. Find $m\angle A$. (The figure is not drawn to scale.)

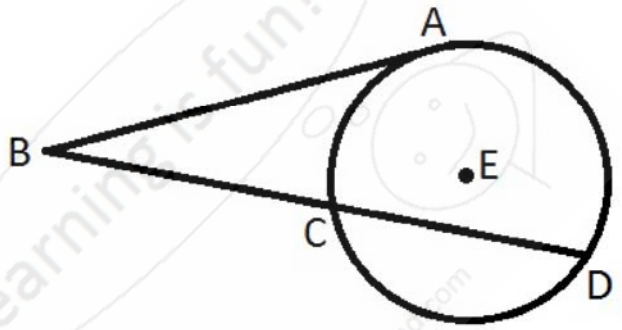


A. 88.5 B. 103.5 C. 79 D. 39.5

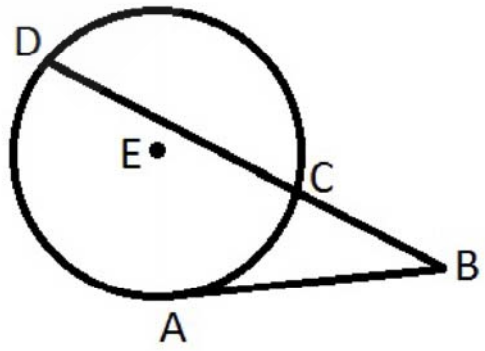
6. In the image below, $\overline{AB}$ is tangent to circle E and $\overline{BD}$ is a secant. $m\overset{\frown}{AC} = 91^0$ and $m\overset{\frown}{AD} = 132^0$. How many degrees is $m\angle ABC$?



7. In the image below, $\overline{AB}$ is tangent to circle E and $\overline{BD}$ is a secant. $m\angle ABC = 19^0$ and $m\overset{\frown}{AC} = 93^0$. How many degrees is $m\overset{\frown}{AD}$?



8. In the image below, $\overline{AB}$ is tangent to circle E and $\overline{BD}$ is a secant. $m\angle ABC = 42^0$ and $m\overset{\frown}{AD} = 137^0$. How many degrees is $m\overset{\frown}{AC}$?



Circles and Secants
Answer Section

1. C
2. A
3. C
4. C
5. D
6. 20.5
7. 131
8. 53