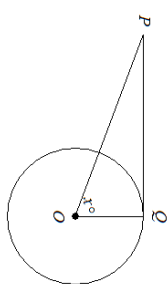


Assume that lines that appear to be tangent are tangent. O is the center of the circle. Find the value of x . (Figures are not drawn to scale.)

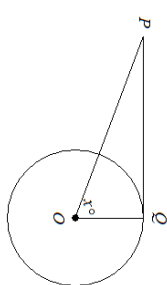
$$m\angle P = 29$$



- A. 30.5 B. 61 C. 119 D. 58

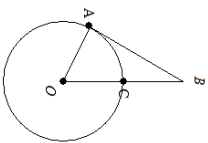
Assume that lines that appear to be tangent are tangent. O is the center of the circle. Find the value of x . (Figures are not drawn to scale.)

$$m\angle P = 23$$



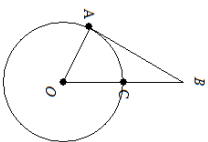
- A. 67 B. 33.5 C. 113 D. 46

\overline{AB} is tangent to $\odot O$. If $AO = 28$ and $BC = 72$, what is AB ?
The diagram is not to scale.



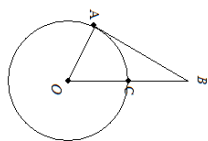
- A. 124 B. 100 C. 144 D. 96

\overline{AB} is tangent to $\odot O$. If $AO = 35$ and $BC = 90$, what is AB ?
The diagram is not to scale.



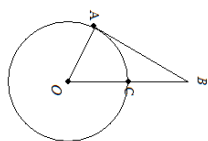
- A. 120 B. 180 C. 155 D. 125

A satellite is 20,600 miles from the horizon of Earth. Earth's radius is about 4,000 miles. Find the approximate distance the satellite is from the point directly below it on Earth's surface. The diagram is not to scale.



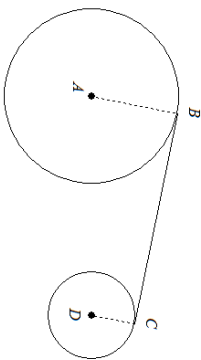
- A. 20,985 miles B. 16,985 miles C. 25,182 miles D. 24,600 miles

A satellite is 19,000 miles from the horizon of Earth. Earth's radius is about 4,000 miles. Find the approximate distance the satellite is from the point directly below it on Earth's surface. The diagram is not to scale.



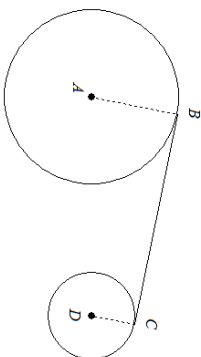
- A. 15,416 miles B. 19,416 miles C. 23,299 miles D. 23,000 miles

\overline{BC} is tangent to circle A at B and to circle D at C (not drawn to scale). $AB = 8$, $BC = 16$, and $DC = 6$. Find AD to the nearest tenth.



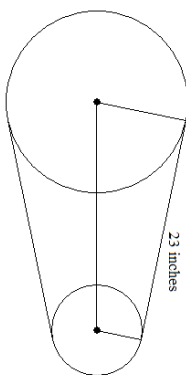
- A. 17.9 B. 17.1 C. 21.3 D. 16.1

\overline{BC} is tangent to circle A at B and to circle D at C (not drawn to scale). $AB = 7$, $BC = 26$, and $DC = 2$. Find AD to the nearest tenth.



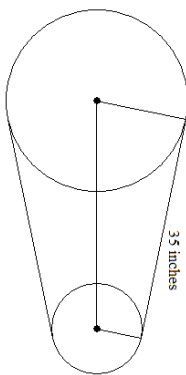
- A. 26.9 B. 26.5 C. 26.1 D. 27.5

A chain fits tightly around two gears as shown. The distance between the centers of the gears is 28 inches. The radius of the larger gear is 18 inches. Find the radius of the smaller gear. Round your answer to the nearest tenth, if necessary. The diagram is not to scale.



- A. 18 inches B. 16 inches C. 2 inches D. 34 inches

A chain fits tightly around two gears as shown. The distance between the centers of the gears is 37 inches. The radius of the larger gear is 16 inches. Find the radius of the smaller gear. Round your answer to the nearest tenth, if necessary. The diagram is not to scale.



- A. 16 inches B. 28 inches C. 4 inches D. 12 inches