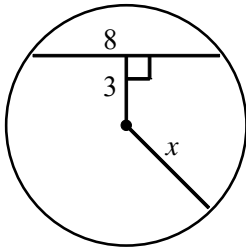


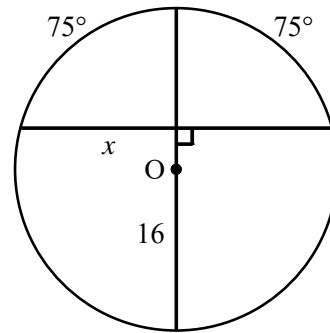
NAME: \_\_\_\_\_

1. Find the value of  $x$  to the nearest tenth.



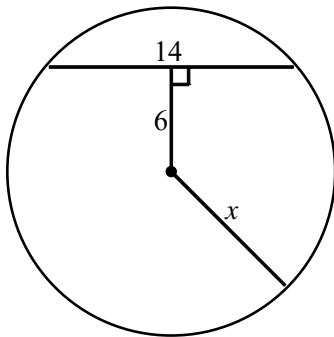
- [A] 3.7 [B] 8.5 [C] 5.0 [D] 7.4

3. Find the value of  $x$  to the nearest tenth.



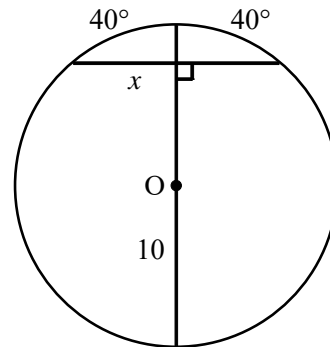
- [A] 9.7 [B] 15.5 [C] 59.7 [D] 4.1

2. Find the value of  $x$  to the nearest tenth.



- [A] 7.9 [B] 12.6 [C] 9.2 [D] 15.2

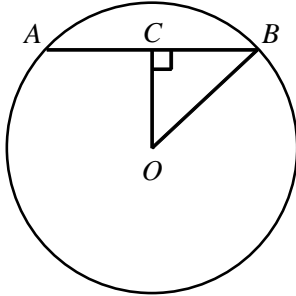
4. Find the value of  $x$  to the nearest tenth.



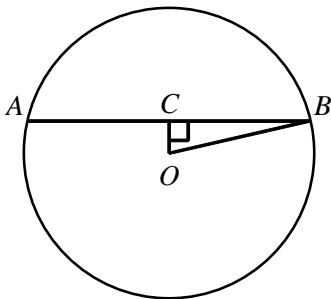
- [A] 3.4 [B] 8.4 [C] 7.7 [D] 6.4

NAME: \_\_\_\_\_

5. Given  $\odot O$  with radius 5 and  $OC = 3$ . Find the length of  $\overline{AB}$ .



6. Given  $\odot O$  with radius 41 and  $OC = 9$ . Find the length of  $\overline{AB}$ .



7. A footbridge is in the shape of an arc of a circle. The bridge is 7 ft tall and 23 ft wide. What is the radius of the circle that contains the bridge? Round your answer to the nearest tenth.

- [A] 25.9 ft                      [B] 12.9 ft  
[C] 18.9 ft                      [D] 5.9 ft

8. A footbridge is in the shape of an arc of a circle. The bridge is 10 ft tall and 21 ft wide. What is the radius of the circle that contains the bridge? Round your answer to the nearest tenth.

- [A] 10.5 ft                      [B] 0.5 ft  
[C] 21.0 ft                      [D] 11.0 ft

9. Assume the Earth is a sphere with radius 4000 miles. A tunnel 200 miles long connects two points  $A$  and  $B$  on the Earth's surface. A ventilation shaft is constructed to the surface at the center of the tunnel. How long is the shaft?

10. A plane intersects a sphere 20 in. from its center, forming circle  $M$  with radius 21 in. What is the radius of the sphere?

- [1] C
- [2] C
- [3] B
- [4] D
- [5] 8
- [6] 80
- [7] B
- [8] A
- [9] about 1.25 mi
- [10] 29 in.