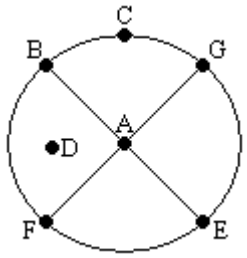
Questions 1 through 5 refer to this circle diagram:



1. The circumference of the circle…

   A. is the area inside the circle.
   B. is the distance from A to G.
   C. is the distance all the way around the edge of the circle.
   D. is the distance from B to E.

2. Which answer choice shows a diameter of the circle shown above?

   A. Line BG
   B. Line FG
   C. Line CD
   D. Line AB

3. Which answer choice shows a radius of the circle shown above?

   A. Line AD
   B. Line AF
   C. Line BE
   D. Line BC

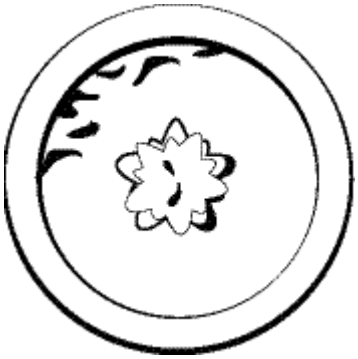
4. What is the center of the circle shown above?

   A. Point A
   B. Point B
   C. Point C
   D. Point D

5. If the diameter of the circle shown were 10 units, then what would the radius of the circle be?

   A. 10 units
   B. 30 units
   C. 5 units
   D. 20 units

Questions 6 through 10 refer to the fountain pictured here. You are given a side view and a top view.



6. The distance from the middle of the fountain to the outside edge is the _____ of the fountain.

   A. circumference
   B. center
   C. radius
   D. diameter

7. The outside stone edge forms the _____ of the fountain.

   A. circumference
   B. area
   C. diameter
   D. radius

8. The water is spraying from the _____ of the fountain.

   A. radius
   B. center
   C. diameter
   D. circumference

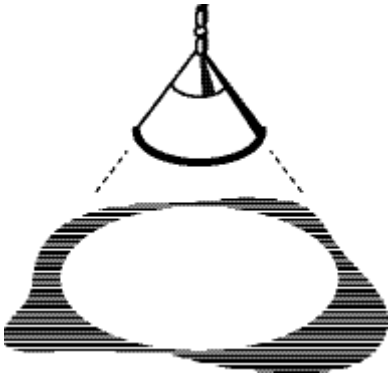
9. If the radius of the fountain is four feet, what is the distance from the middle of the fountain to the outside edge?

   A. 16 feet
   B. 8 feet
   C. 2 feet
   D. 4 feet

10. If the diameter of the fountain is twelve feet, what is the distance from the center of the fountain to the outside edge?

    A. 6 feet
    B. 12 feet
    C. 24 feet
    D. 38 feet

Questions 11 through 15 refer to the picture below. The hanging lamp shown casts a circle of light on the ground.



11. The point at the middle of the circle of illumination, directly under the hanging lamp, is the _____ of the circle.

    A. circumference
    B. diameter
    C. center
    D. radius

12. If a line across the circle of illumination passed directly under the middle of the hanging lamp, the line would be a(n) _____ of the circle.

    A. radius
    B. area
    C. diameter
    D. circumference

13. The distance from the point directly under the light bulb to the edge of the circle of illumination is called the _____ .

    A. circumference
    B. diameter
    C. area
    D. radius

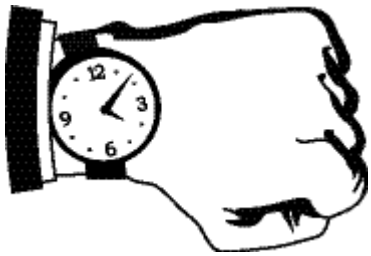
14. If the illuminated circle is 4.5 feet at the widest point, then what is the radius of the circle?

    A. 18 feet
    B. 2.25 feet
    C. 4.5 feet
    D. 9 feet

15. Suppose you want to place a table that is 3 feet square under the lamp. (Diagonally from corner to corner, the table measures roughly 4 ¼ feet.) At table height, the circle of illumination from the lamp has a radius of 2 ½ feet. Can the light from the lamp illuminate the entire table, or will some of the table be in shadow?

    A. the light will shine on the middle of the table, but the edges will be in shadow
    B. the light will shine on the center and edges of the table, but the corners will be in shadow
    C. The light can cover the entire table
    D. there is not enough information to be sure

Questions 16 through 20 refer to the wristwatch pictured here:



16. The numbers on the watch are lined up along the _____ of the watch face.

    A. center
    B. circumference
    C. diameter
    D. radius

17. The hands of this watch are mounted at the _____ of the watch face.

    A. center
    B. circumference
    C. diameter
    D. radius

18. The measure across the watch face from edge to edge, directly through the twelve and the six, is a(n) _____ of the watch face.

    A. diameter
    B. circumference
    C. radius
    D. area

19. If the measure from the center of the watch face to the outside edge is half an inch, then the watch face has a(n) _____ of one inch.

    A. radius
    B. area
    C. circumference
    D. diameter

20. If the diameter of the watch face were an inch and a half, then what would be the radius of the watch face?

    A. 3 inches
    B. 3.4 inches
    C. 3/4 inch
    D. 7 inches

Answer Key

1. C
2. B
3. B
4. A
5. C
6. C
7. A
8. B
9. D
10. A
11. C
12. C
13. D
14. B
15. C
16. B
17. A
18. A
19. D
20. C