

**1. What is the definition of a circle?**

- a. A set of all the points in a plane that are the same distance from one point in the plane
- b. A set of all the points in a plane that are the same distance from any point in the plane
- c. A round shape that contains empty space
- d. A round, three-dimensional shape

**2. What is the diameter of a circle?**

- a. The distance around the circle
- b. The distance from any point on the edge of a circle to any other point
- c. The distance from the center to any point on the circle
- d. The distance across a circle, through its center

**3. What is the radius of a circle?**

- a. The distance around the circle
- b. The distance across the circle, through its center
- c. The distance from the center to any point on the circle
- d. The distance from any point on the edge of a circle to any other point

**4. What is the circumference of a circle?**

- a. The distance around the circle
- b. The area of the circle
- c. The distance from the center to any point on the circle
- d. Half the area of a circle

**5. Which of the following must you use to calculate the area or circumference of a circle?**

- a. 3
- b. x
- c. Pi
- d. e

**6. What is the circumference of a circle with a diameter of 8 cm?**

- a. About 35 cm
- b. About 25 cm
- c. About 16 cm
- d. About 4 cm

**7. What is the diameter of a circle with a radius of 5 cm?**

- a. 2.5 cm
- b. 25 cm
- c. 5 cm
- d. 10 cm

**8. What is the area of a circle with a radius of 10 cm?**

- a. About 31.4 square cm
- b. About 314 square cm
- c. About 100 square cm
- d. About 50 square cm

**9. What is the area of a circle with a diameter of 10 cm?**

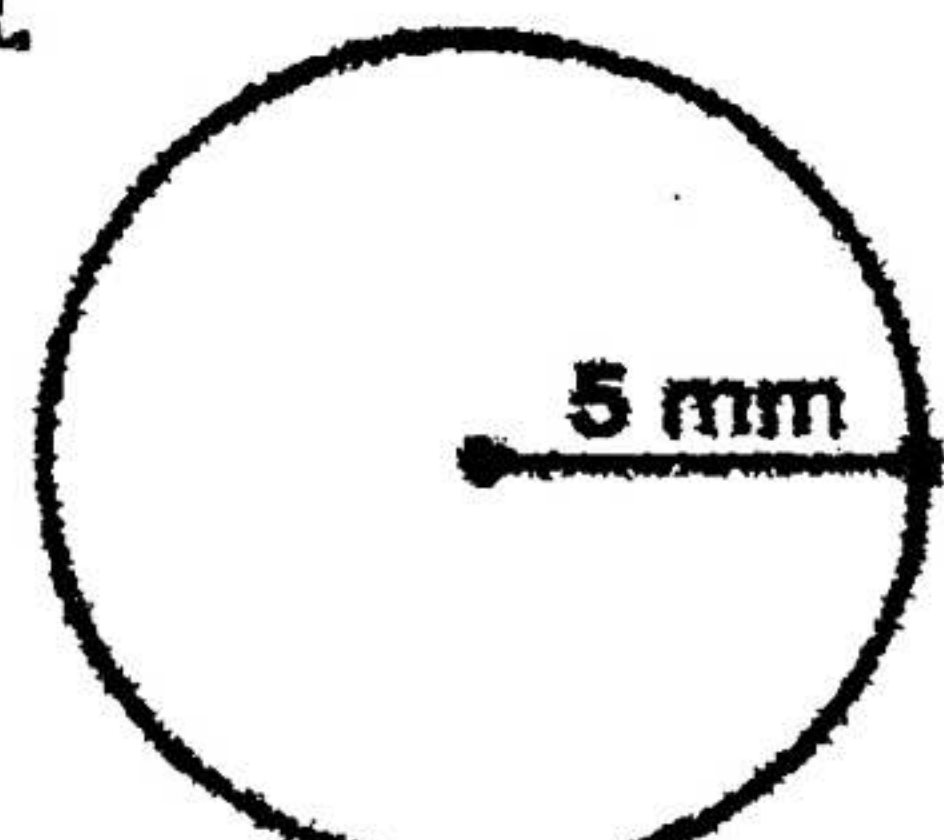
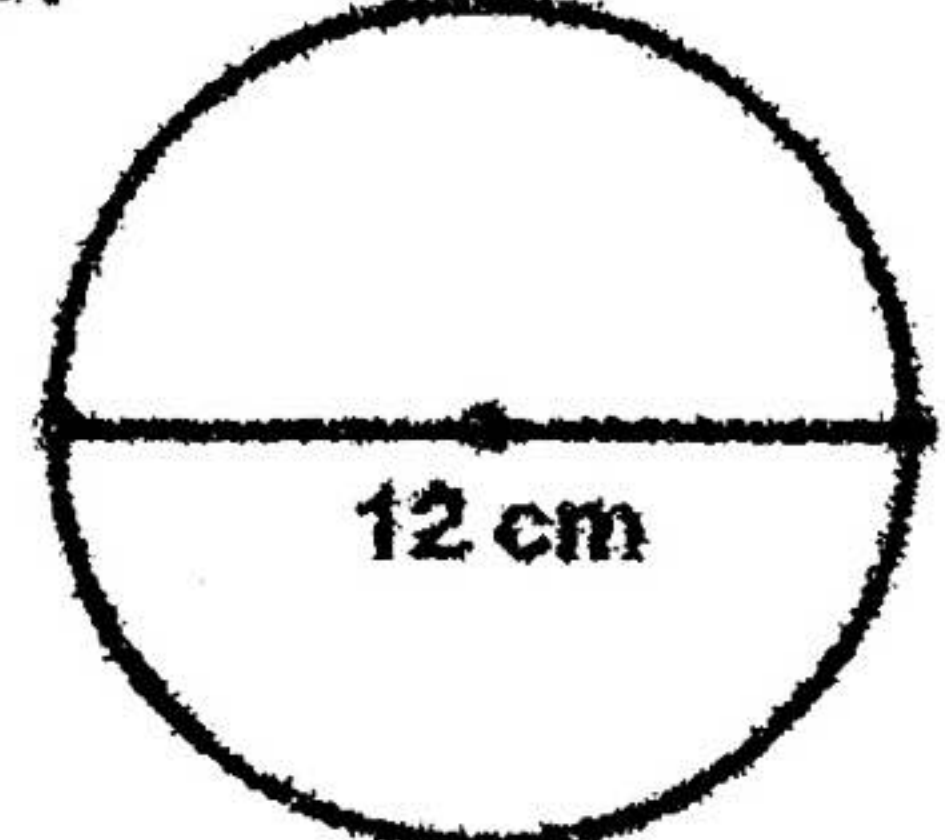
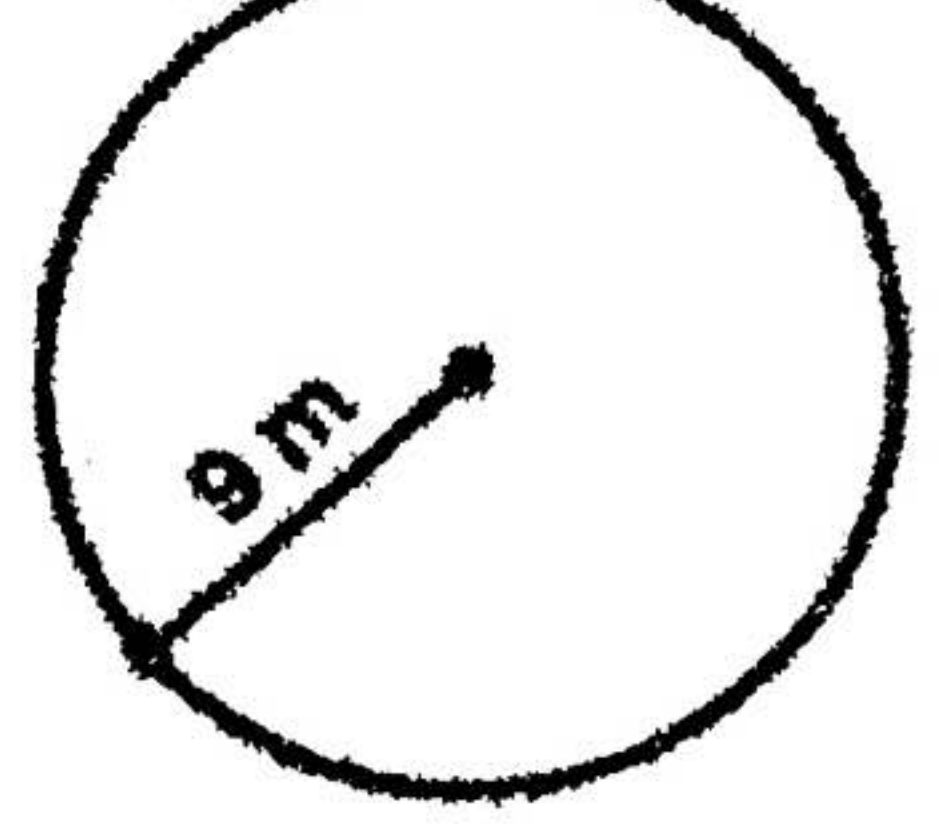
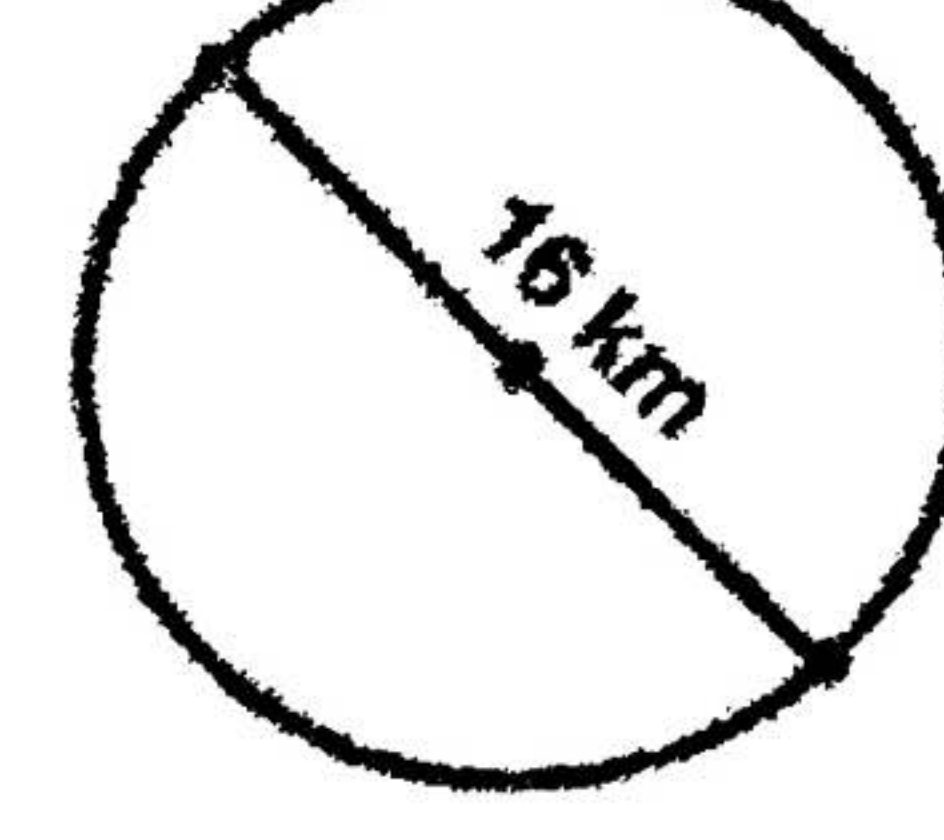
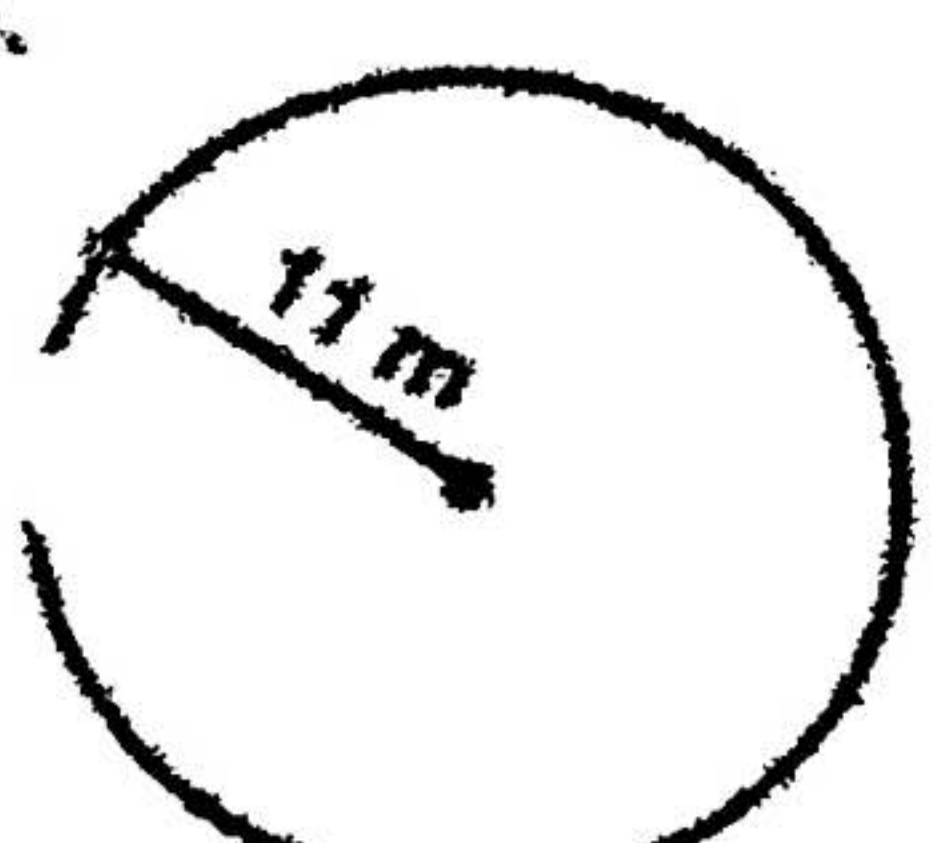
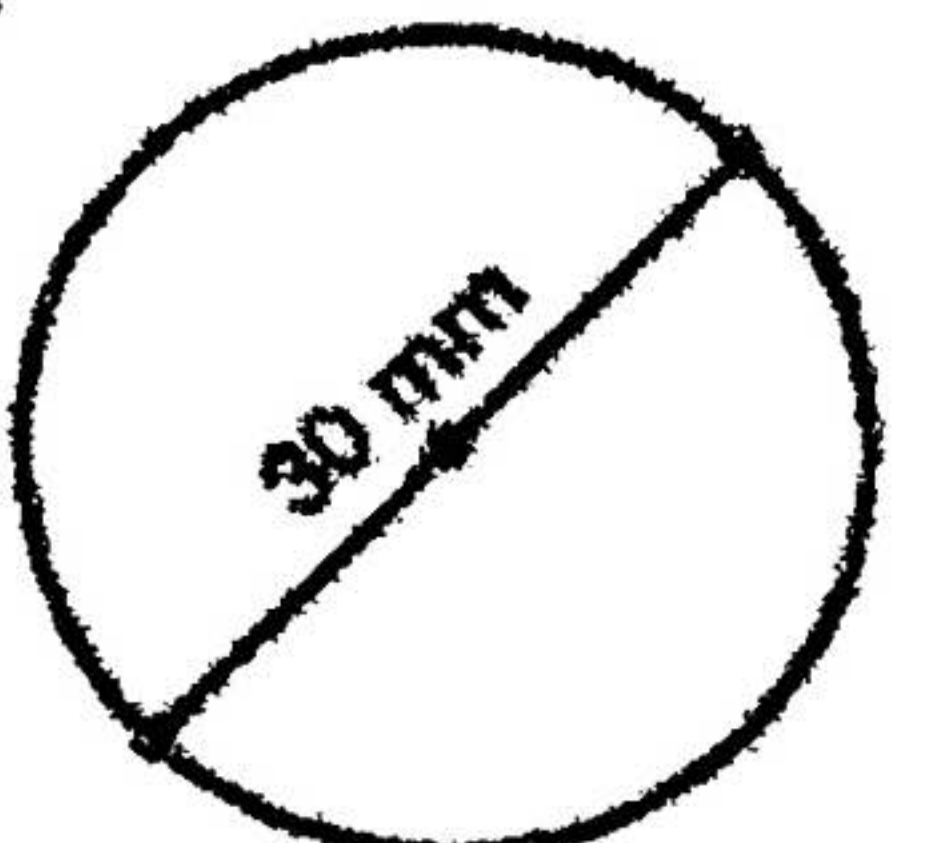
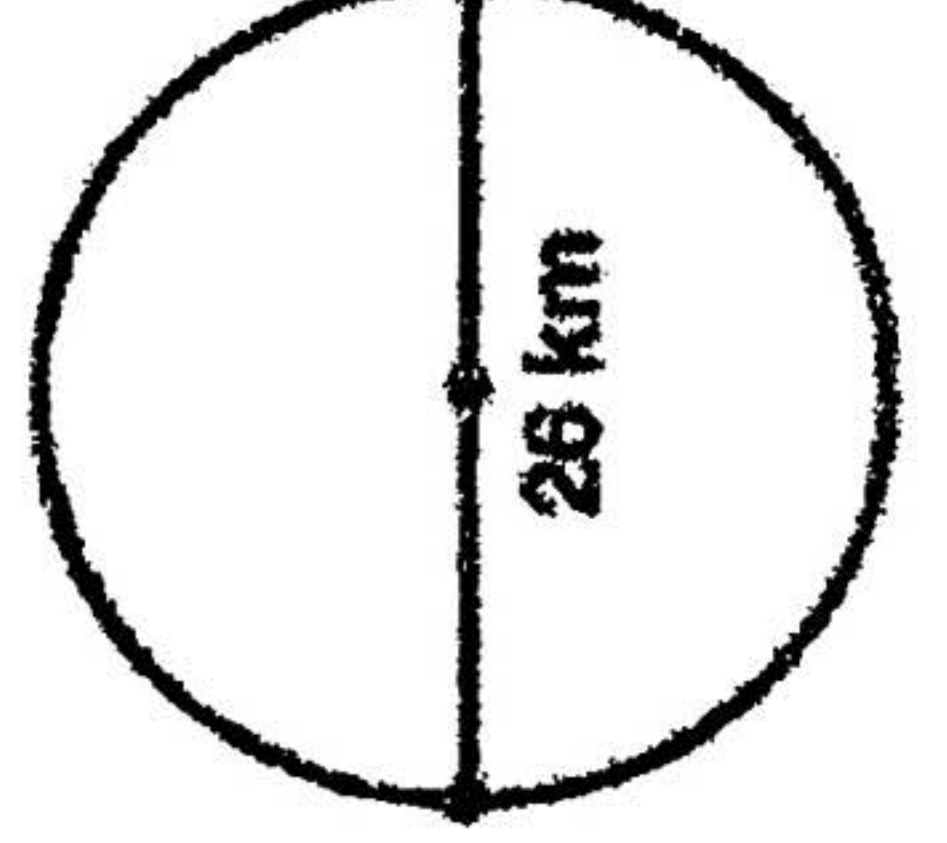
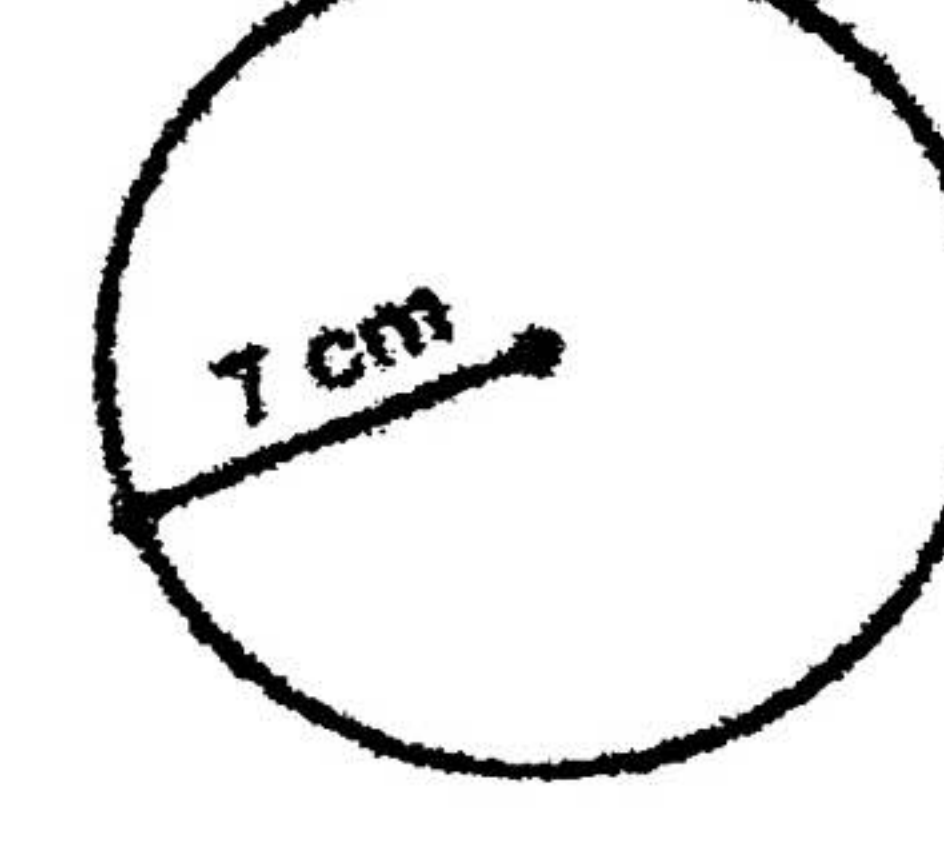
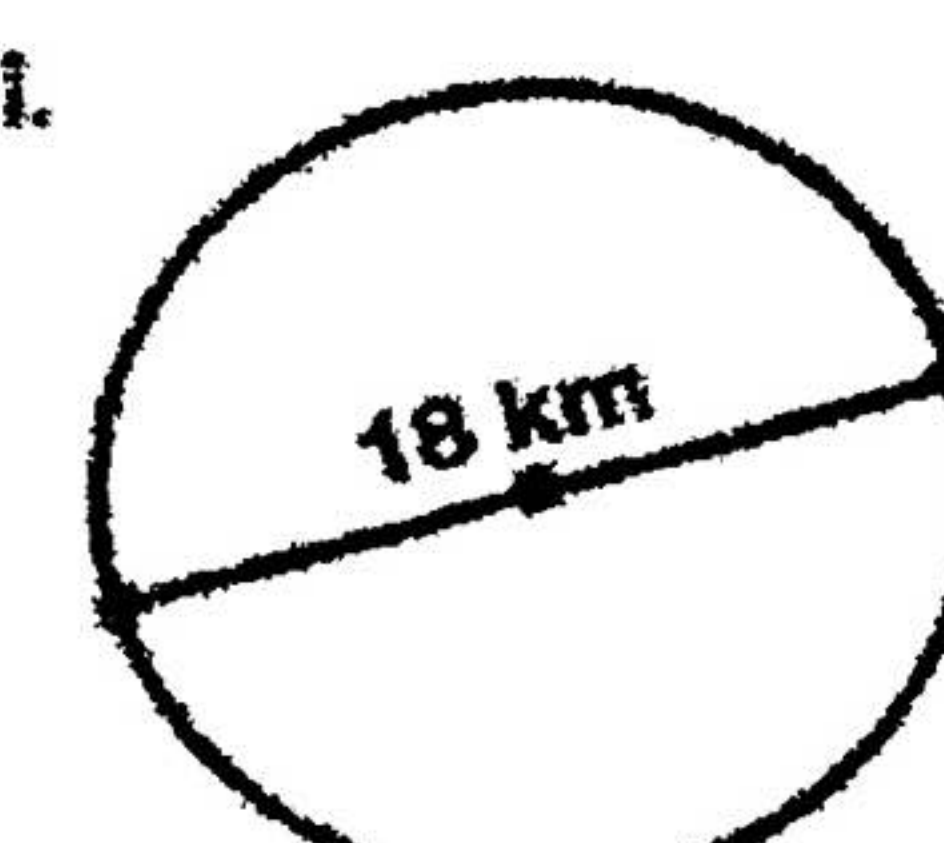
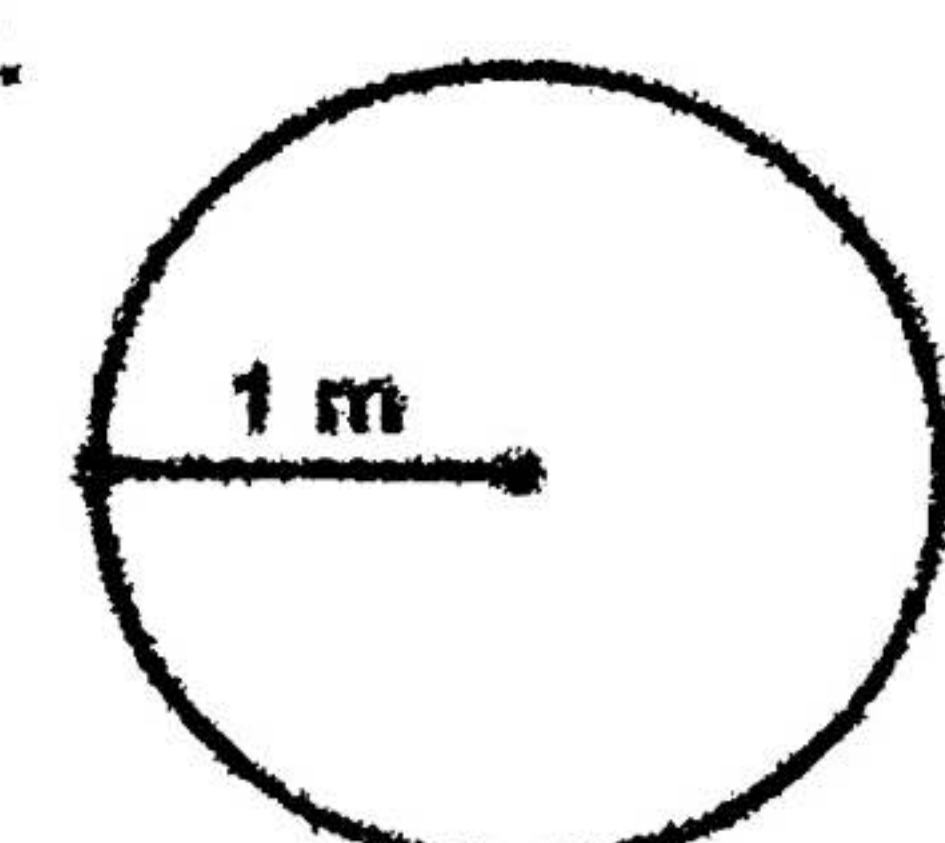
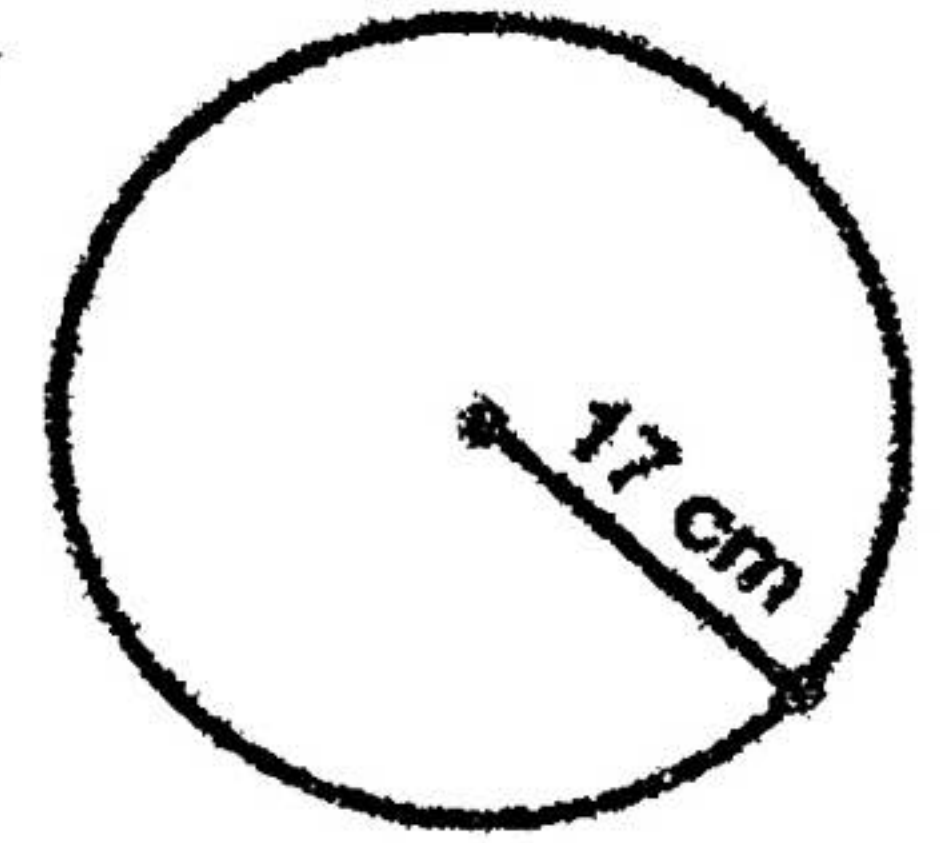
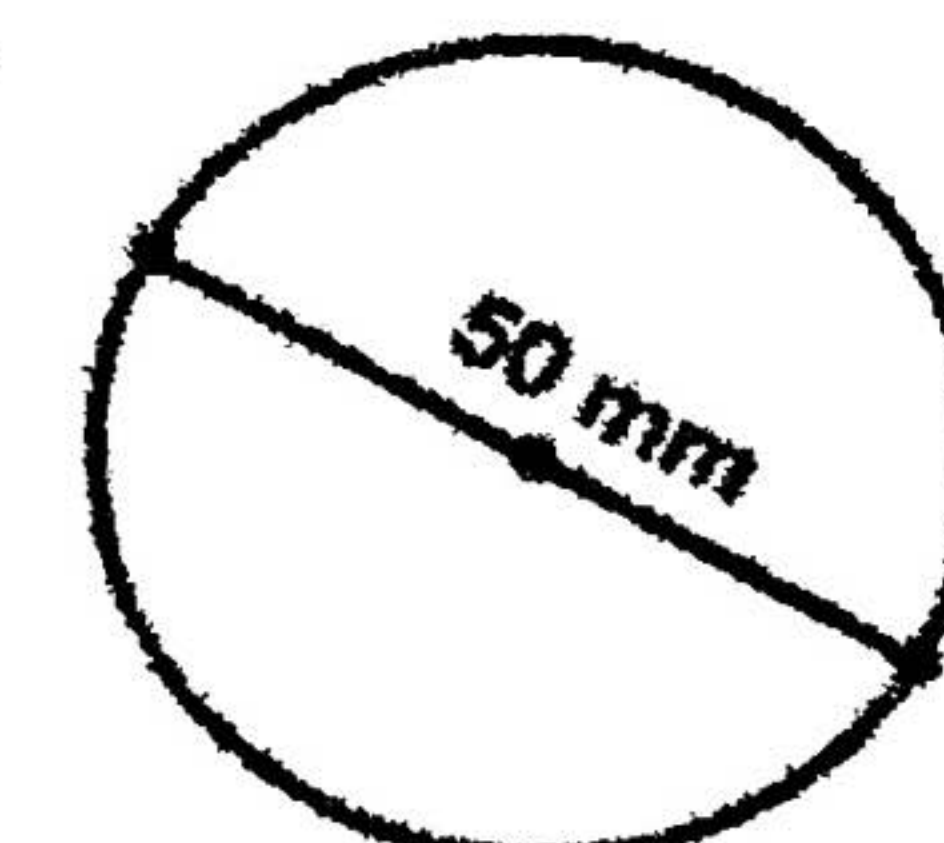
- a. About 79 square cm
- b. About 55 square cm
- c. About 125 square cm
- d. About 15 square cm

**10. What is the area of a circle with a radius of 12 cm?**

- a. About 113 square cm
- b. About 144 square cm
- c. About 179 square cm
- d. About 452 square cm

# Radius and Diameter

What is the radius and diameter of each circle?

a.  radius = _____ diameter = _____	b.  radius = _____ diameter = _____	c.  radius = _____ diameter = _____	d.  radius = _____ diameter = _____
e.  radius = _____ diameter = _____	f.  radius = _____ diameter = _____	g.  radius = _____ diameter = _____	h.  radius = _____ diameter = _____
i.  radius = _____ diameter = _____	j.  radius = _____ diameter = _____	k.  radius = _____ diameter = _____	l.  radius = _____ diameter = _____

John has a round swimming pool. The distance from the center of the pool to the edge is 3 meters. What is the diameter of John's pool?

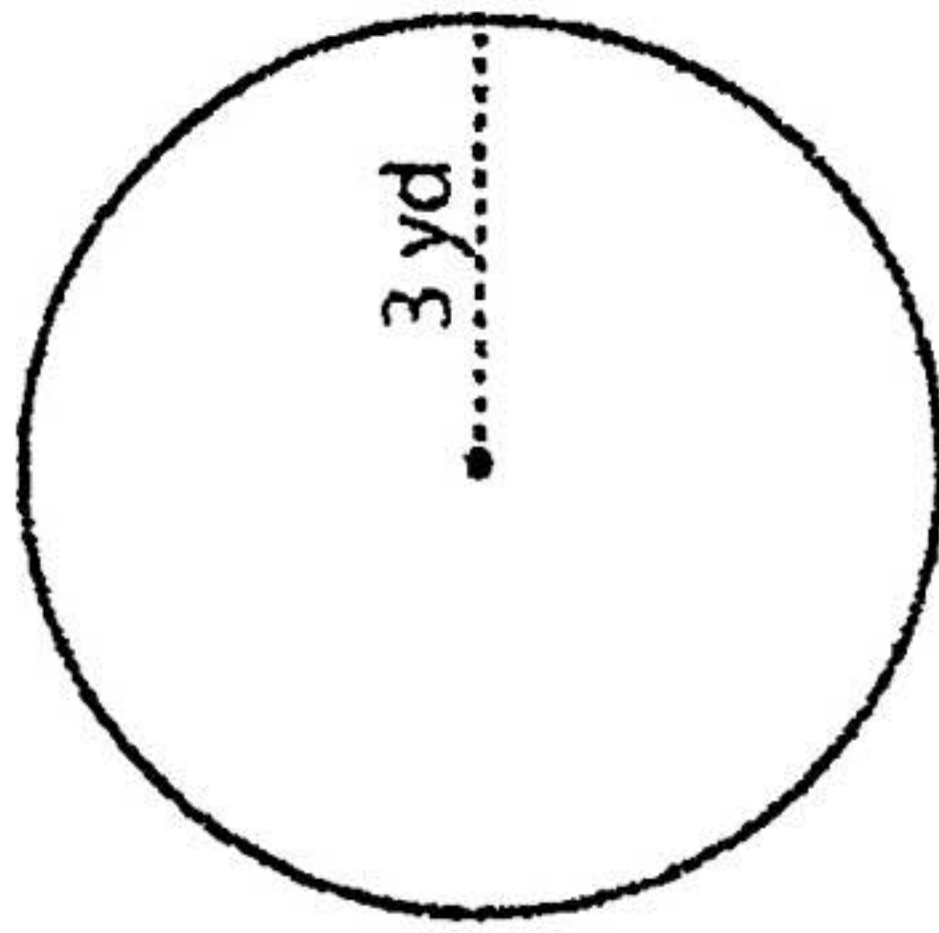
answer: \_\_\_\_\_

**Radius / Diameter**

Easy: 51

Find the radius or diameter of each circle.

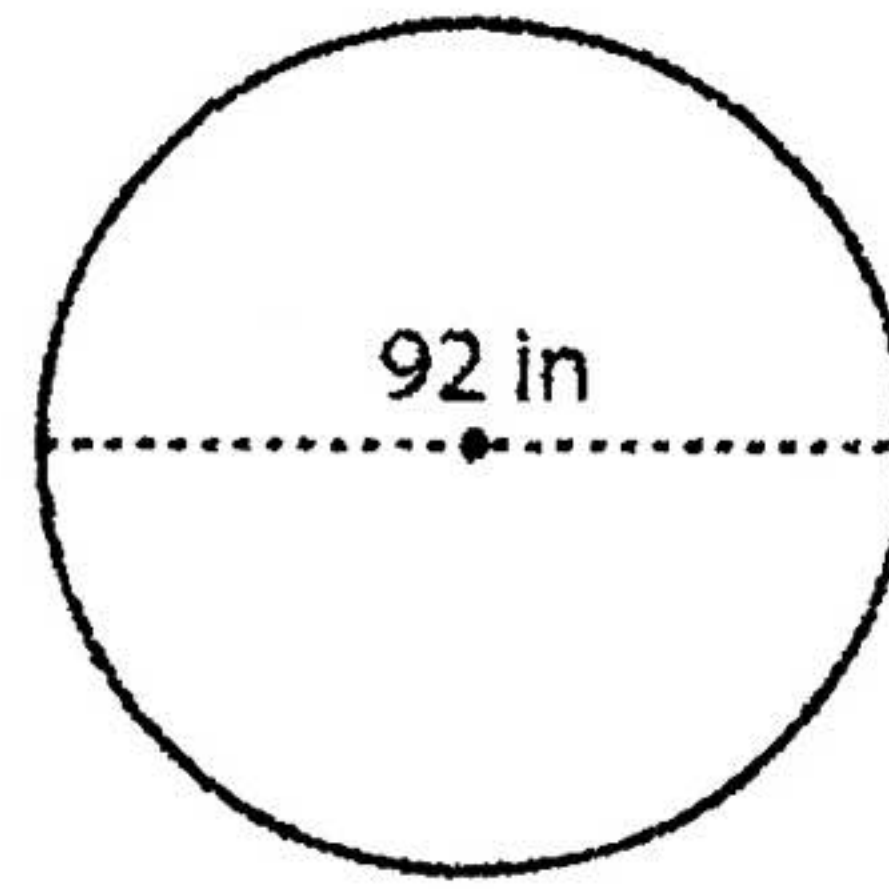
1)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

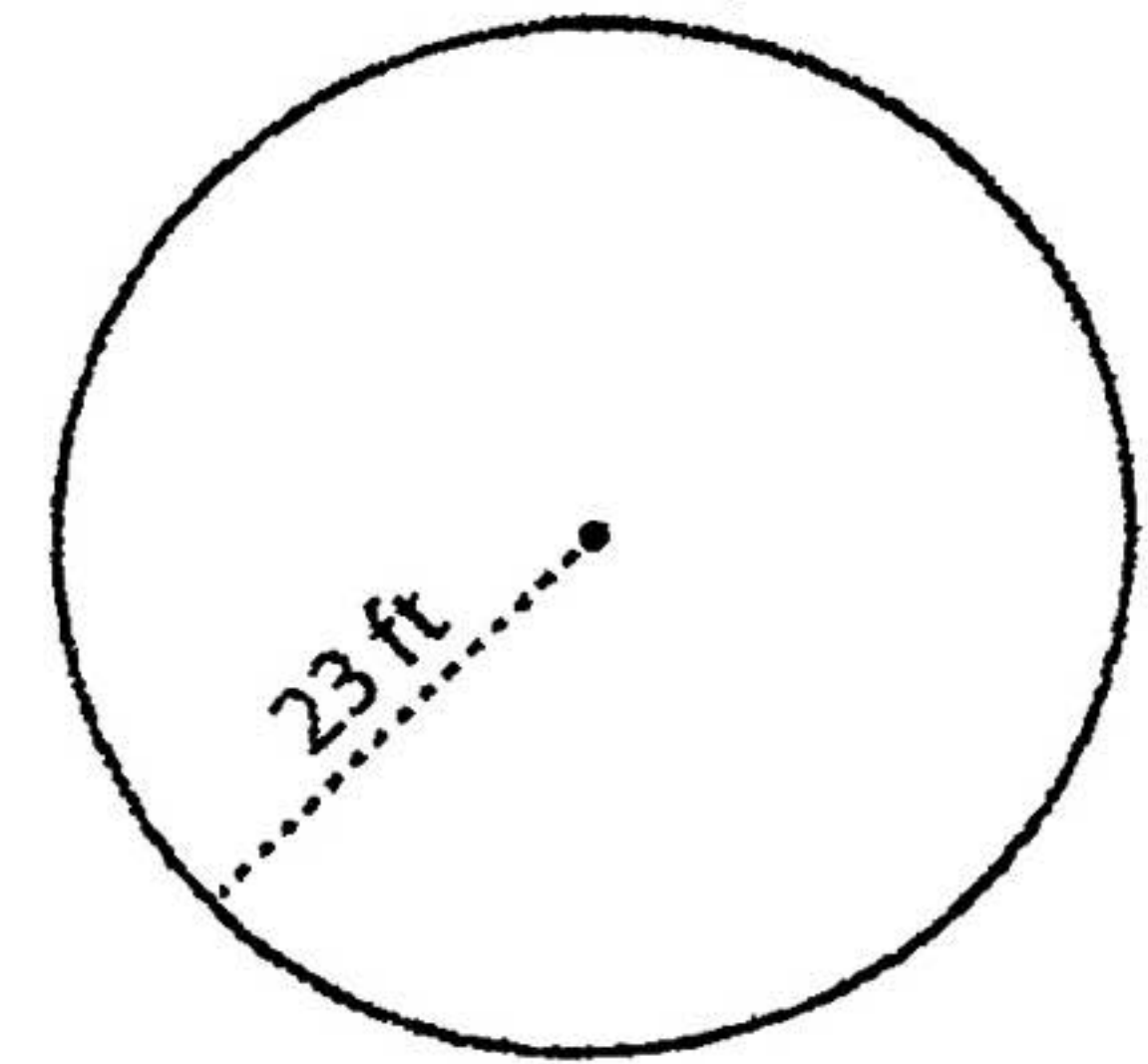
2)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

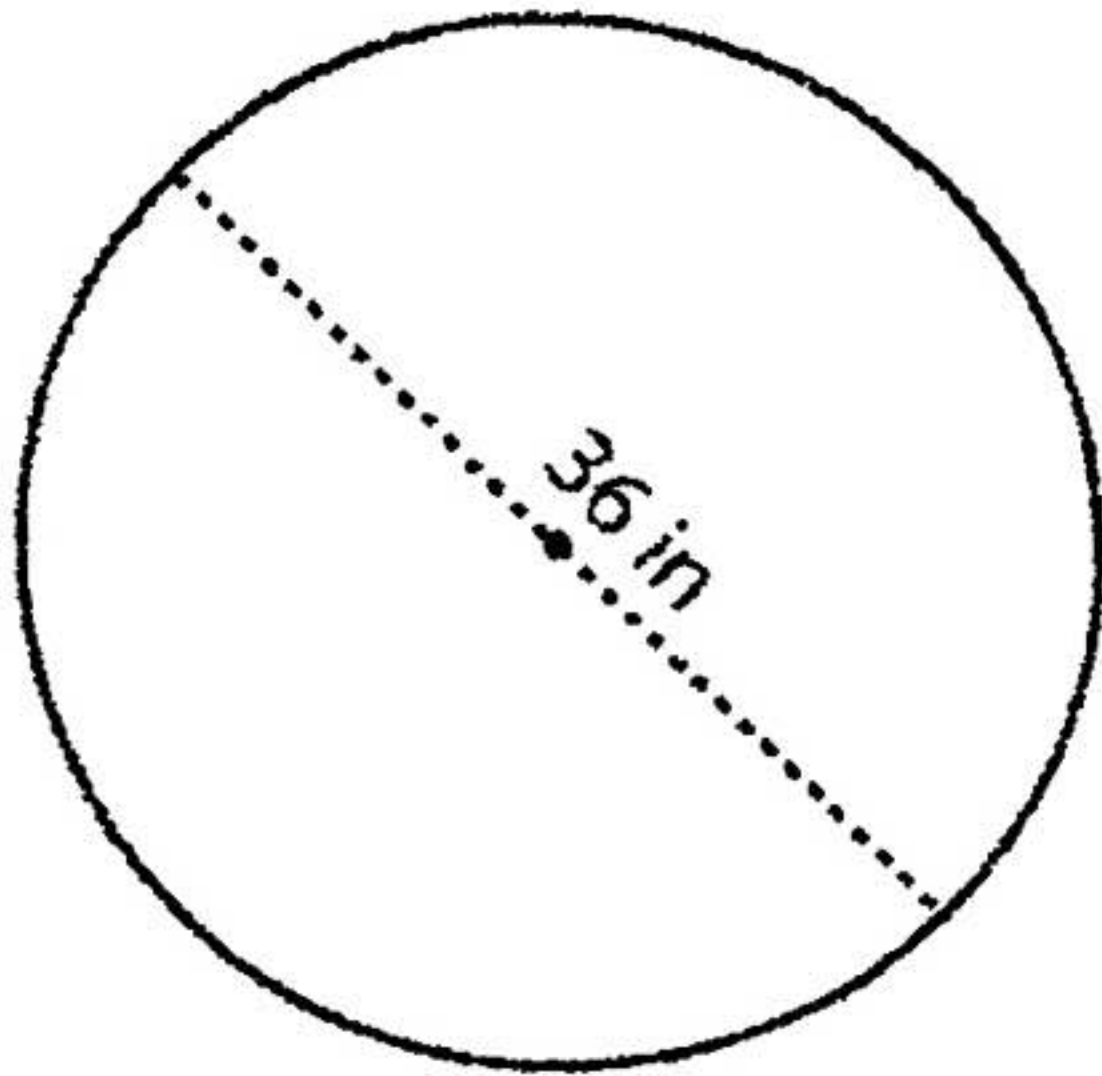
3)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

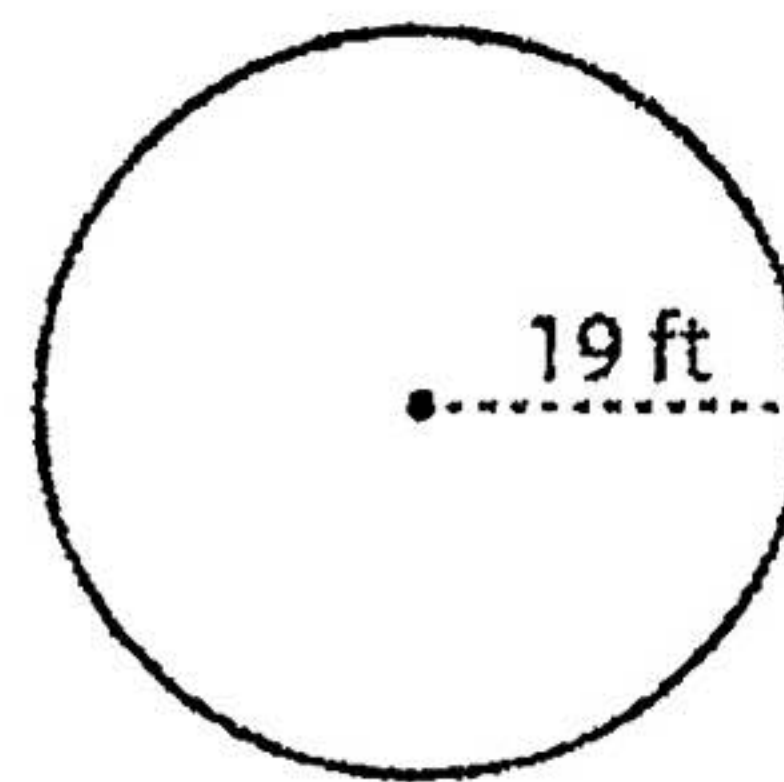
4)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

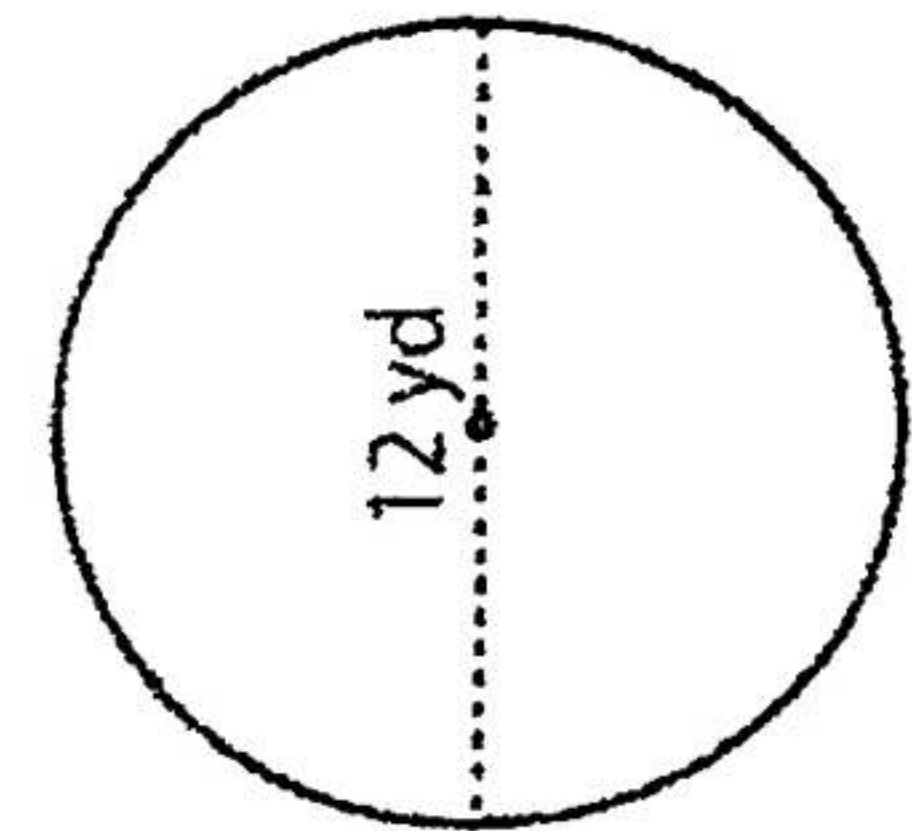
5)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

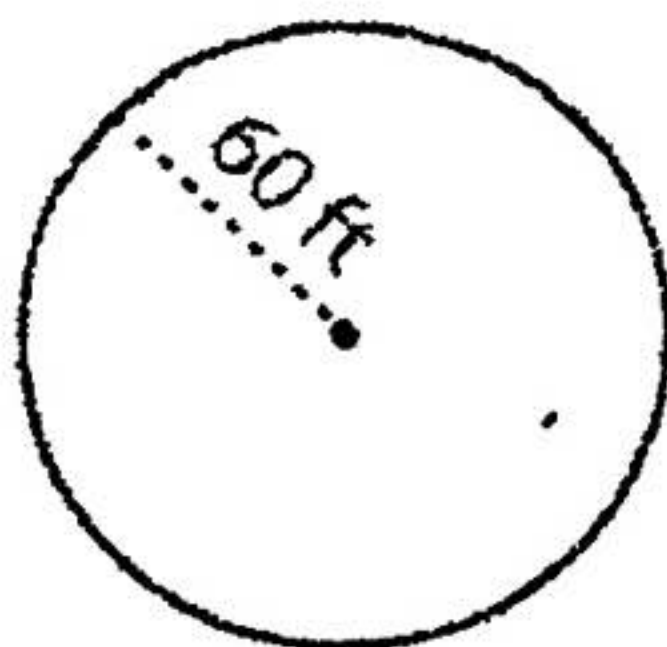
6)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

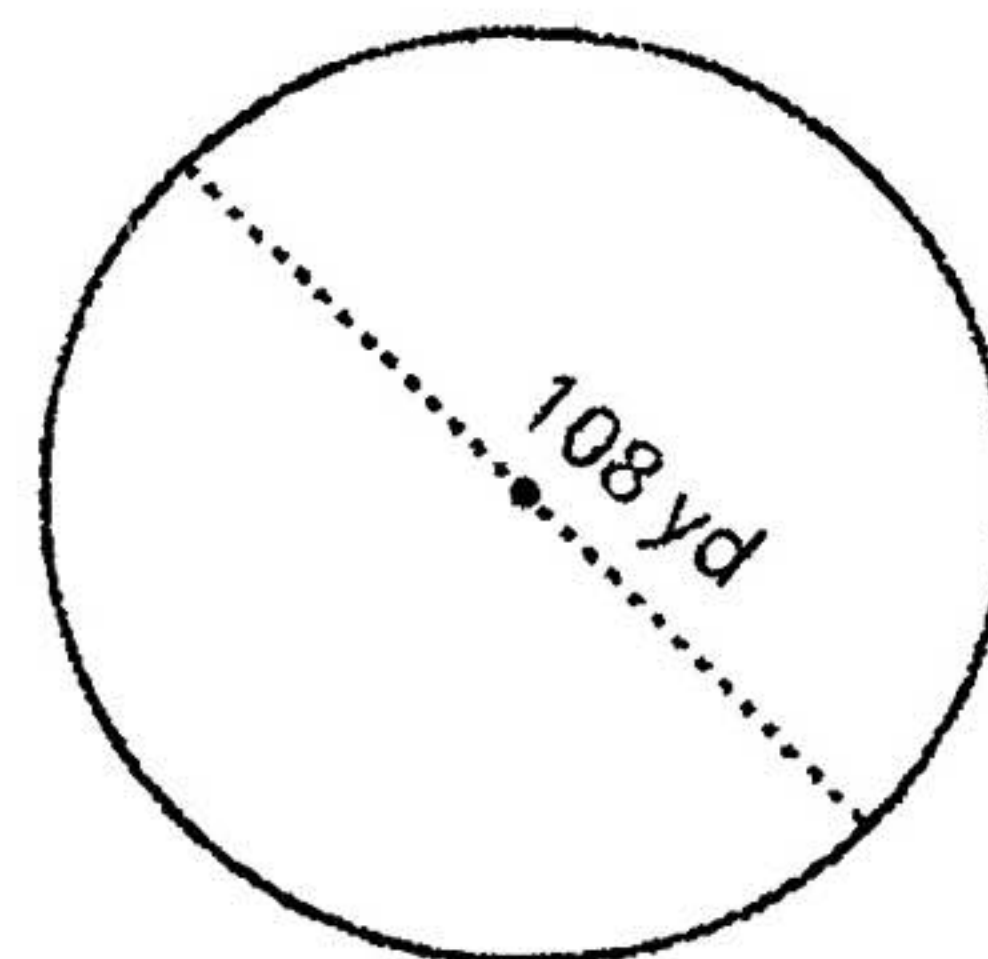
7)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

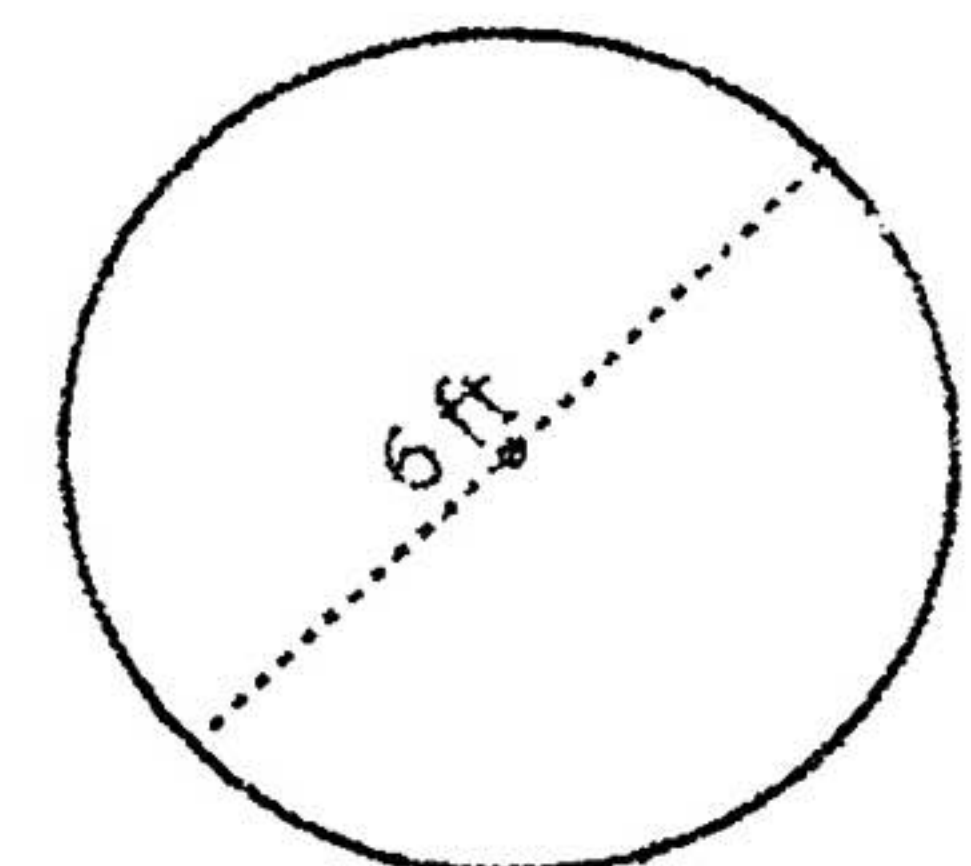
8)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

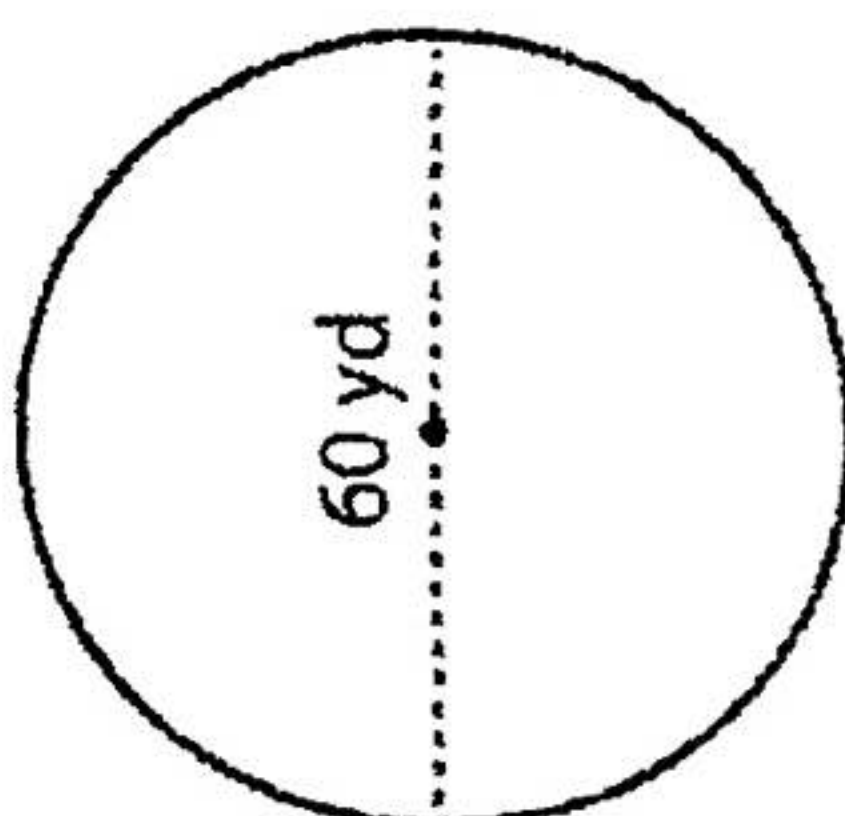
9)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

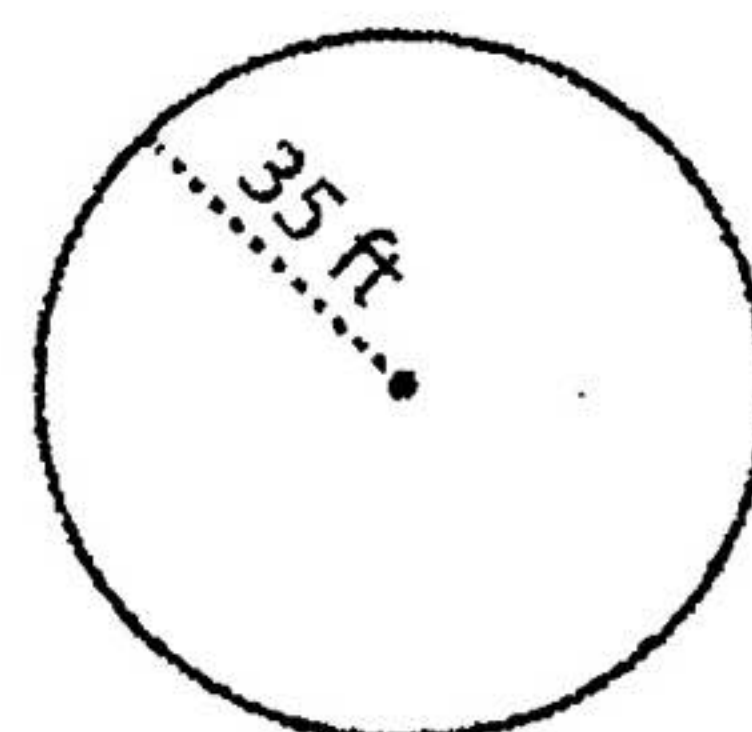
10)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

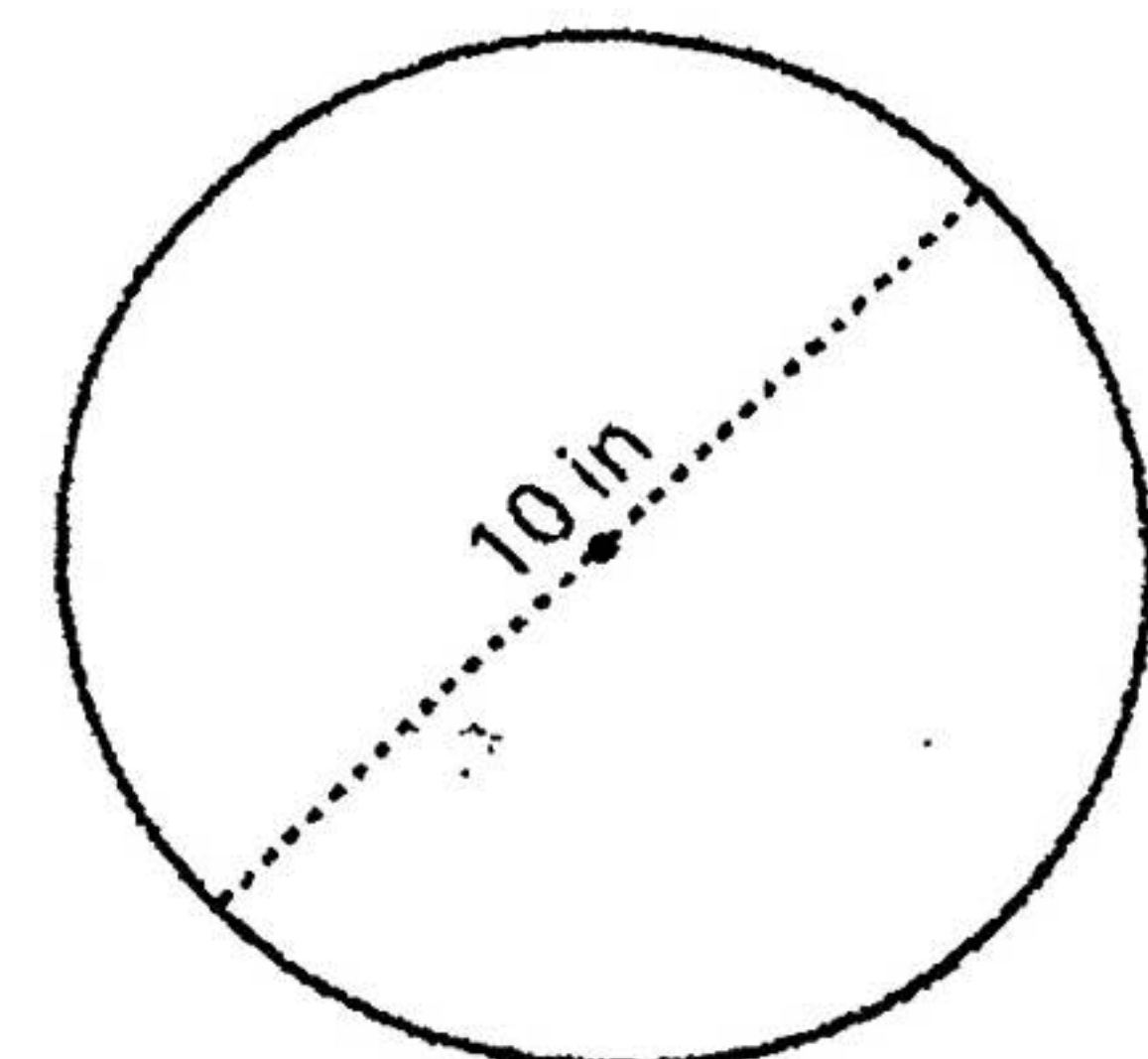
11)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

12)



Radius = \_\_\_\_\_

Diameter = \_\_\_\_\_

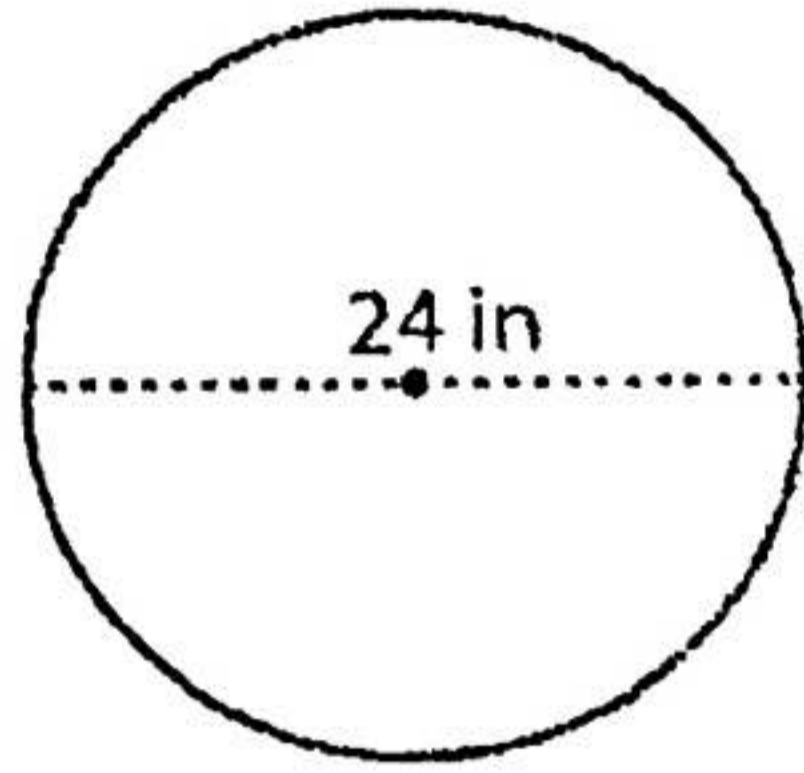
Name : \_\_\_\_\_

Score : \_\_\_\_\_

### Circle - Circumference

Diameter Moderate: 51

Example :



Circumference of a circle =  $2\pi r$  or  $\pi d$

Diameter (d) = 24 in

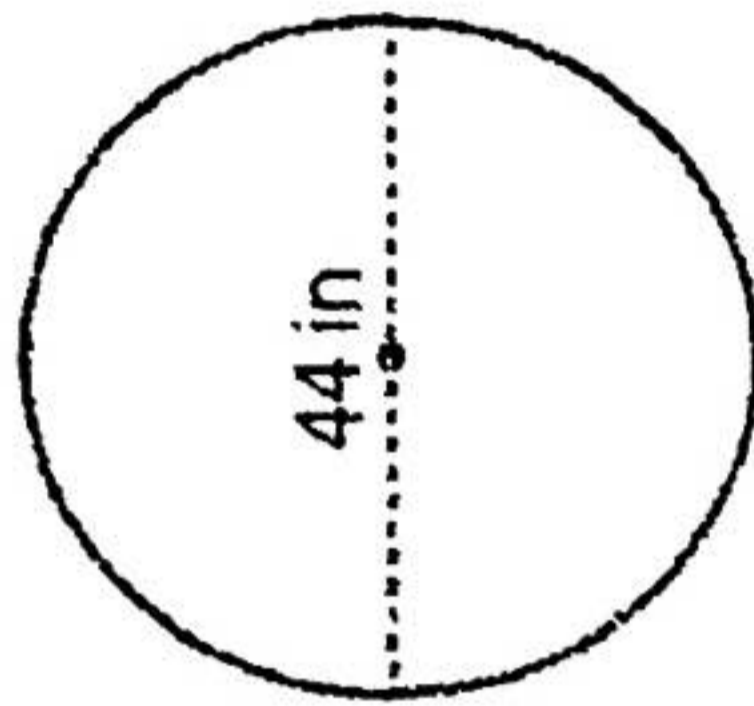
Circumference =  $\pi d$

=  $3.14 \times 24$

Circumference = 75.4 in

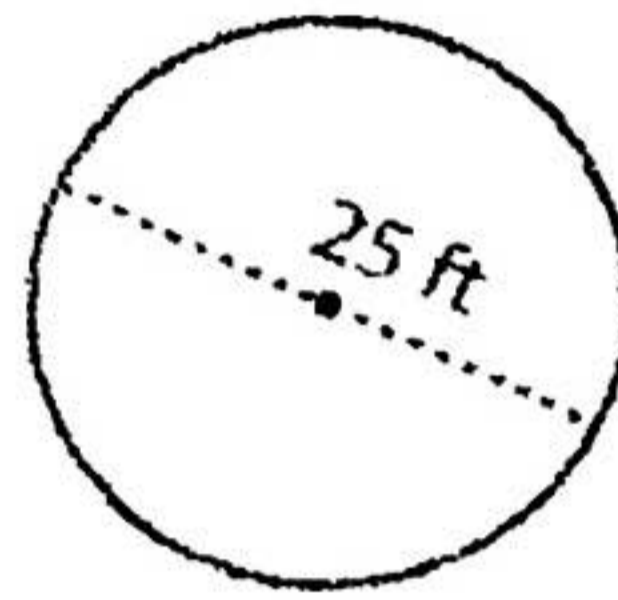
Find the circumference of each circle. Round the answer to tenth decimal place. ( use  $\pi=3.14$  )

1)



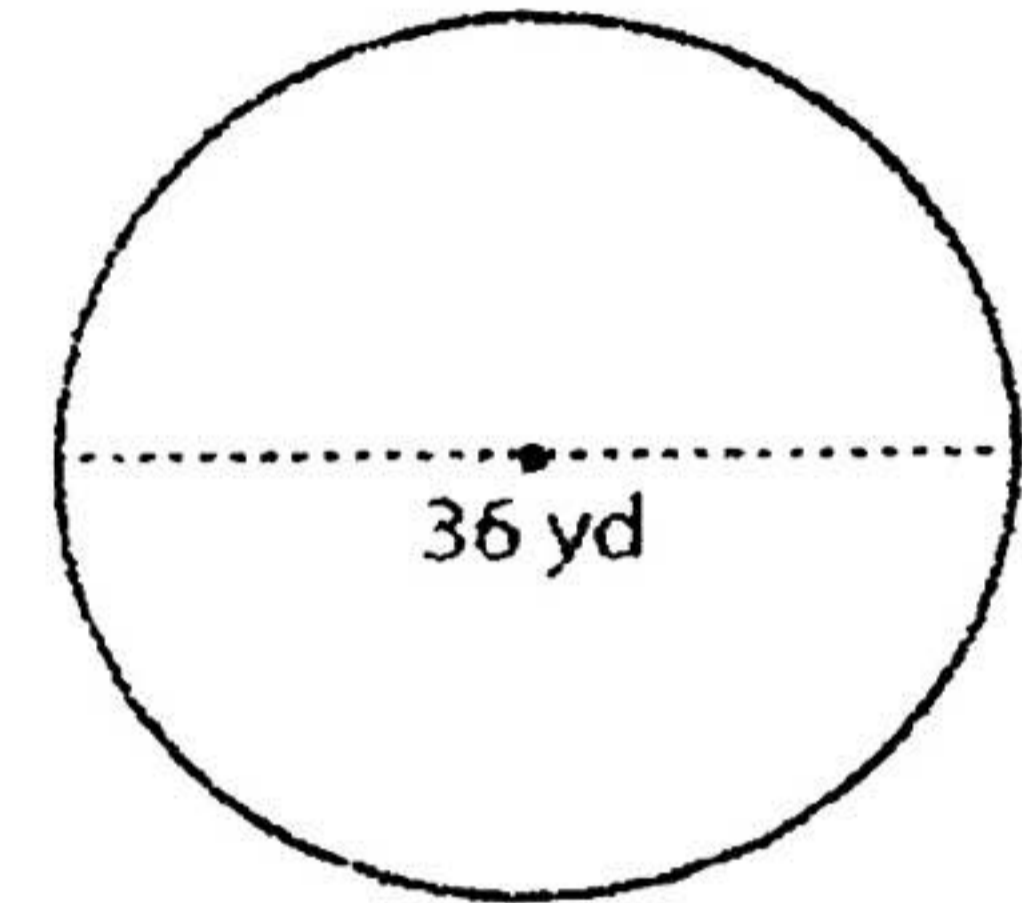
Circumference =

2)



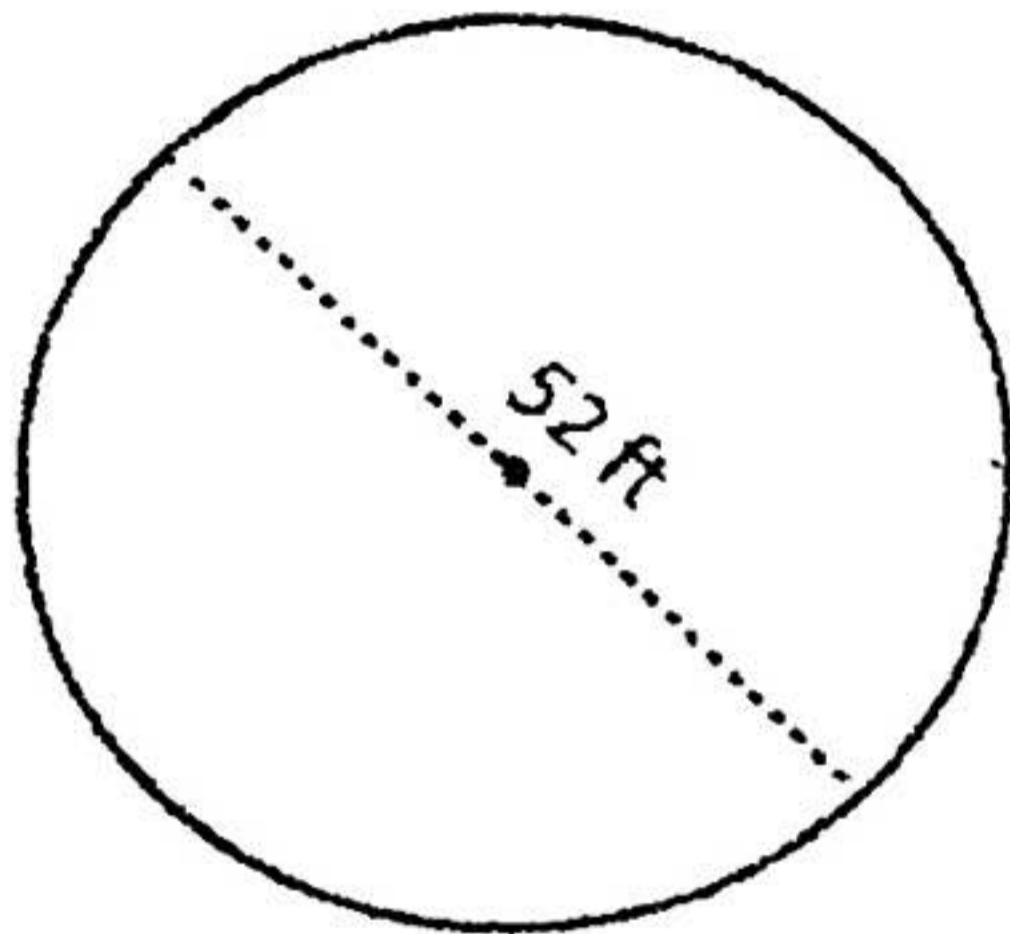
Circumference =

3)



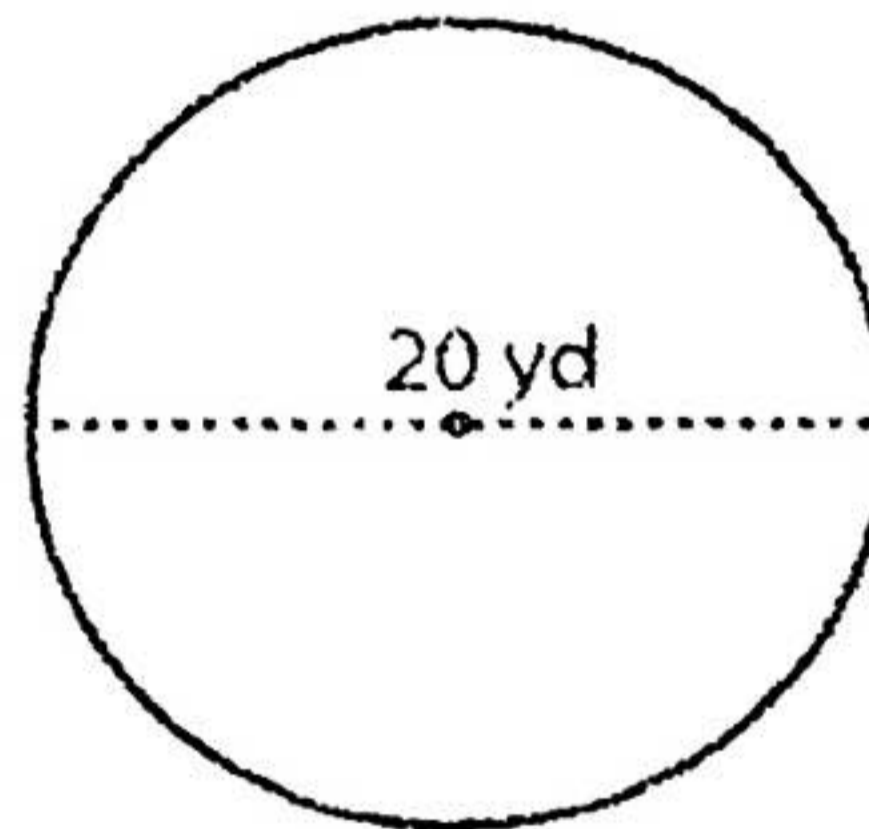
Circumference =

4)



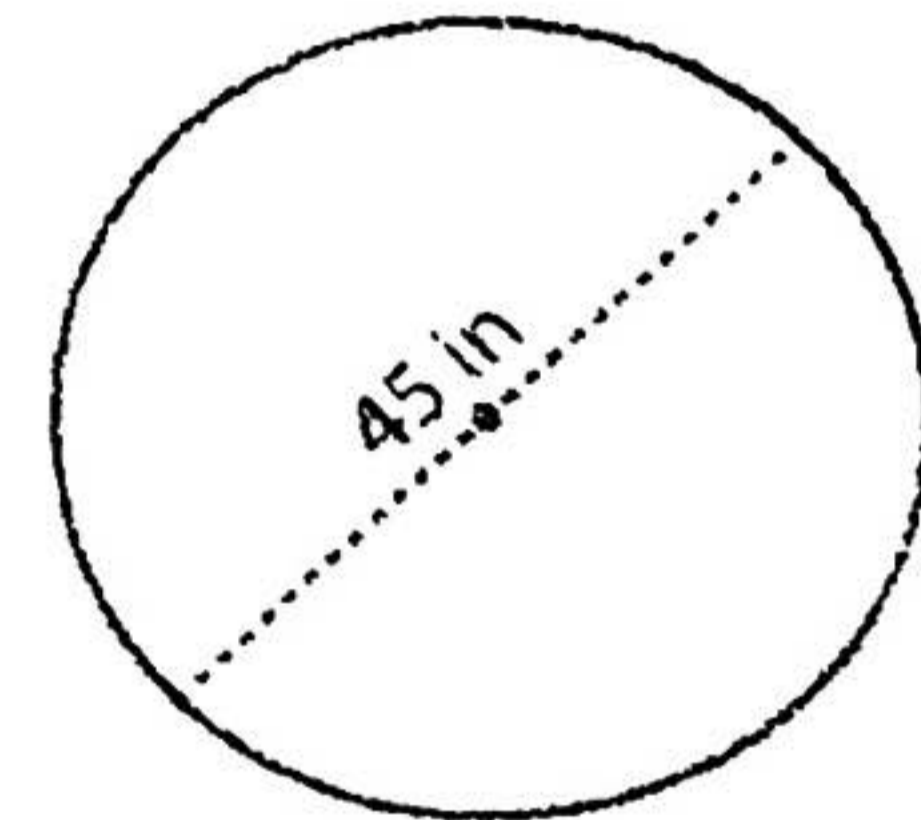
Circumference =

5)



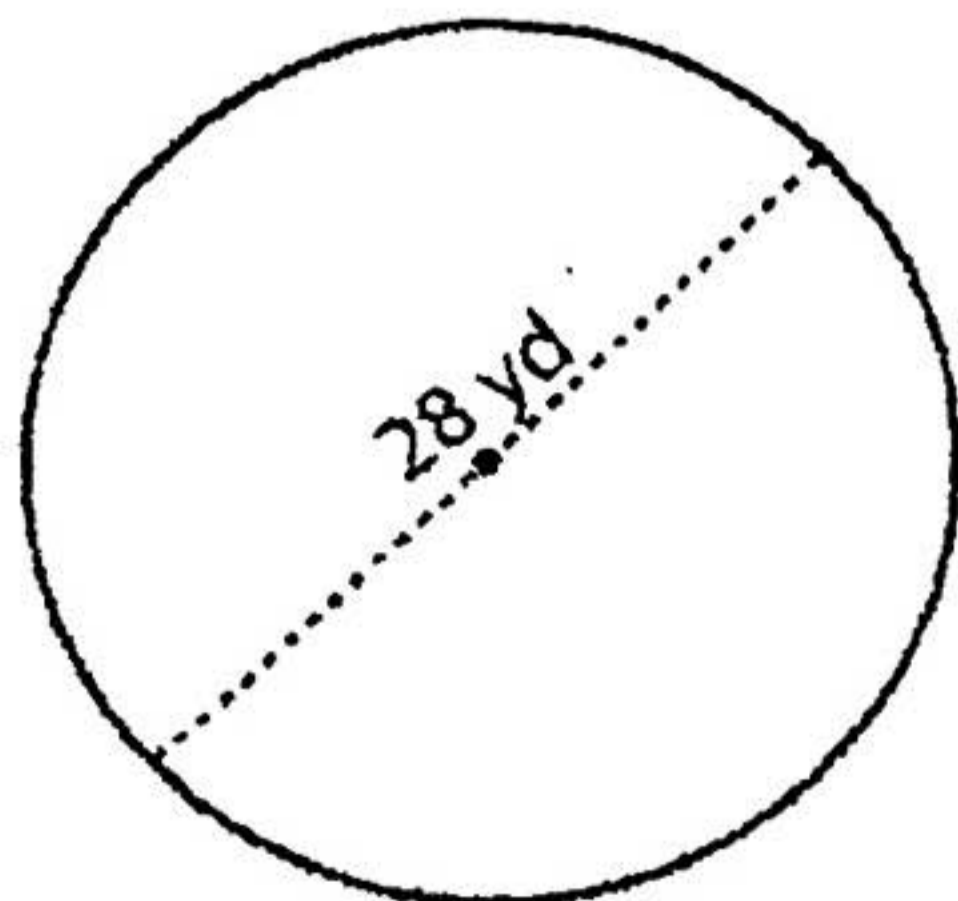
Circumference =

6)



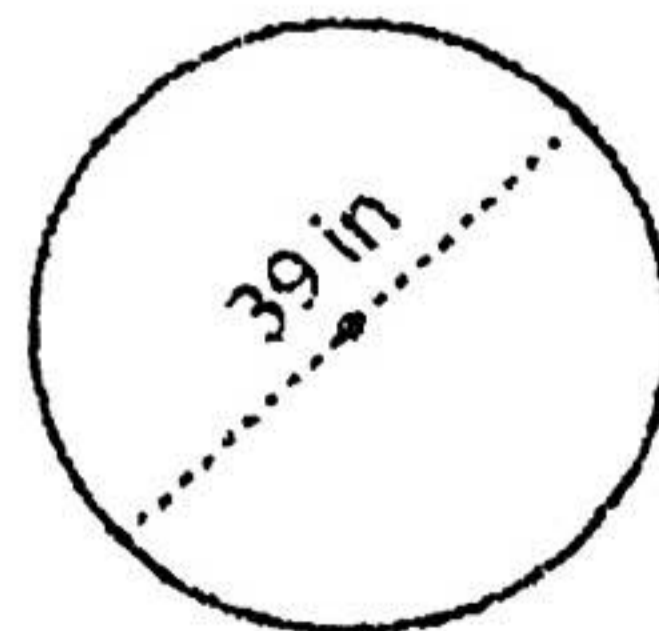
Circumference =

7)



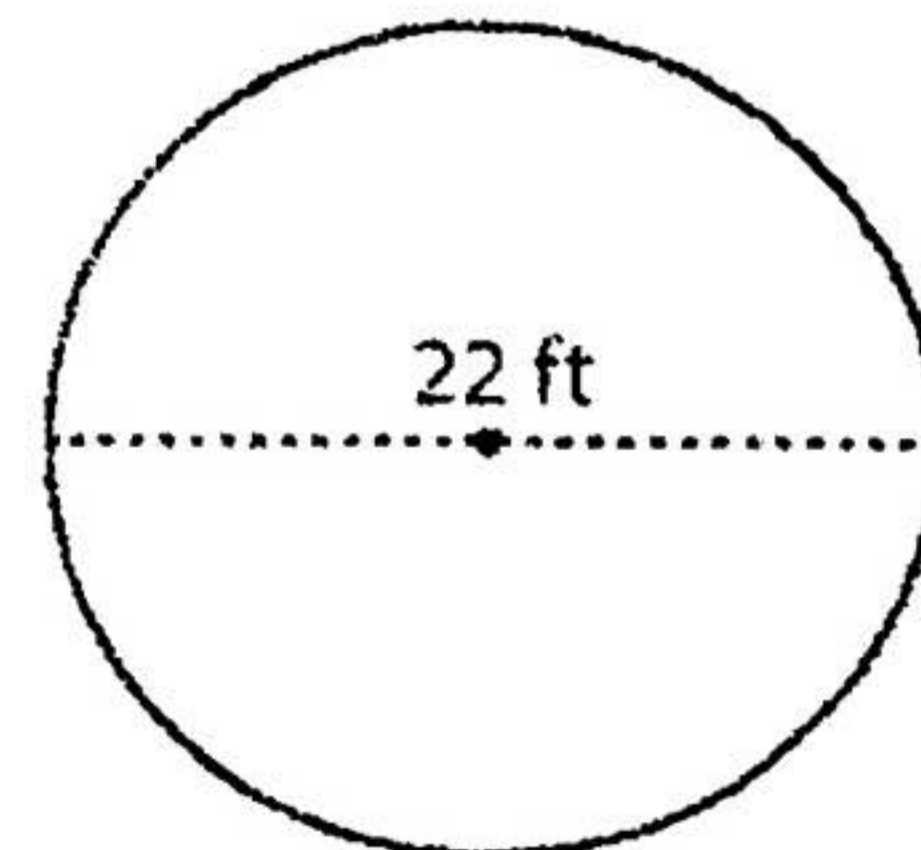
Circumference =

8)



Circumference =

9)



Circumference =

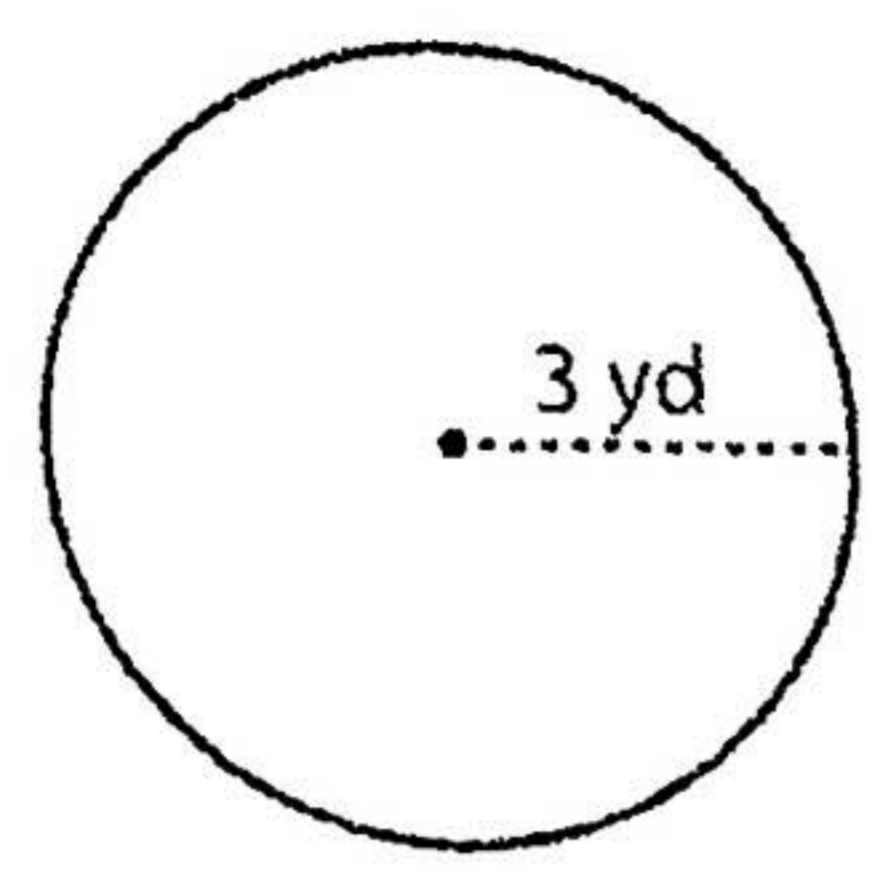
Name : \_\_\_\_\_

Score : \_\_\_\_\_

### Circle - Circumference

Radius Easy: S1

Example :



**Circumference of a circle =  $2\pi r$**

Radius ( $r$ ) = 3 yd

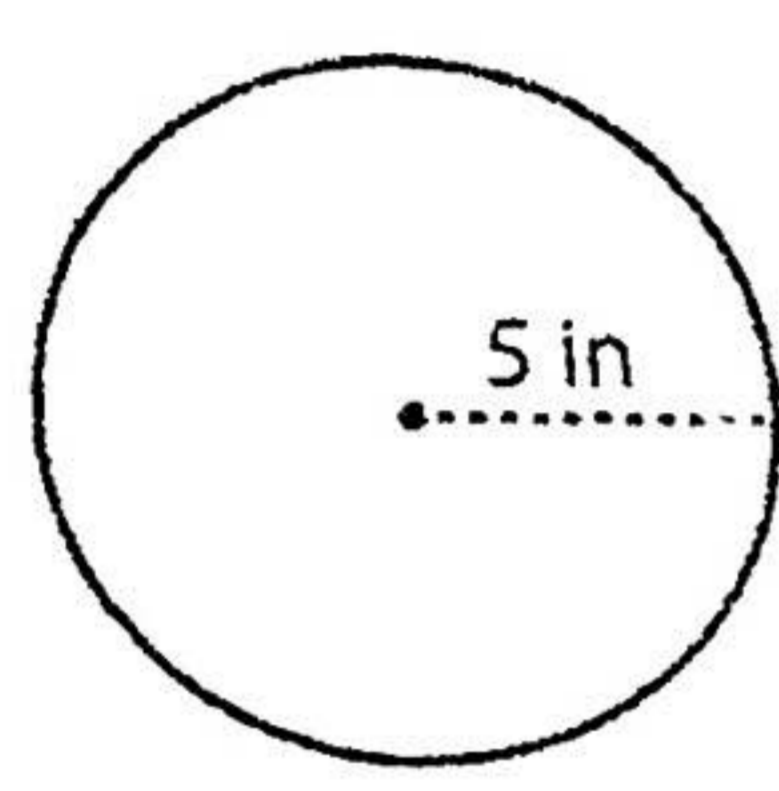
Circumference =  $2\pi r$

=  $2 \times \pi \times 3$

Circumference =  **$6\pi$  yd**

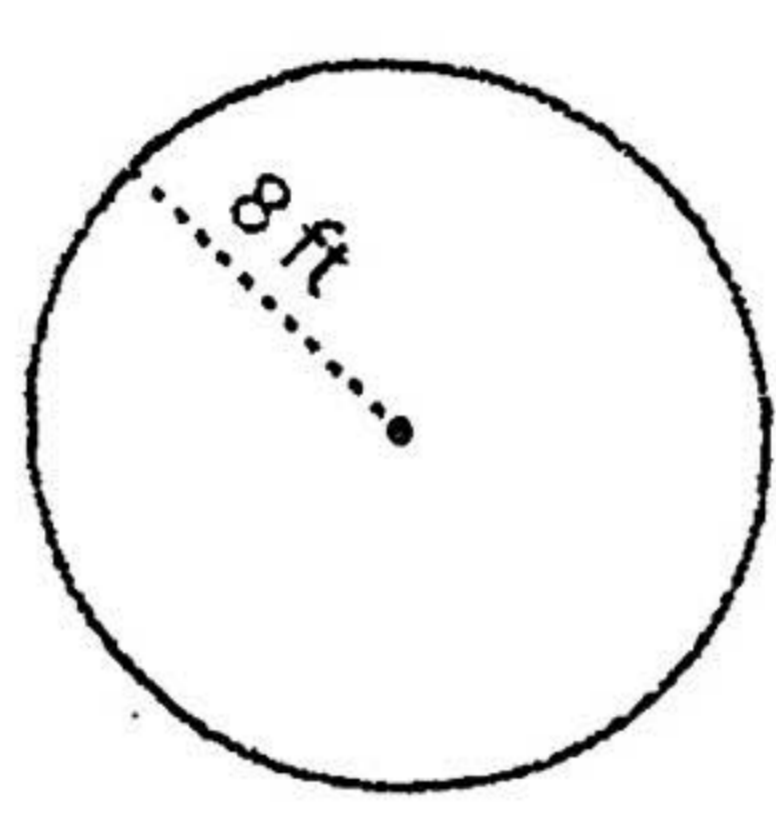
Find the exact circumference of each circle.

1)



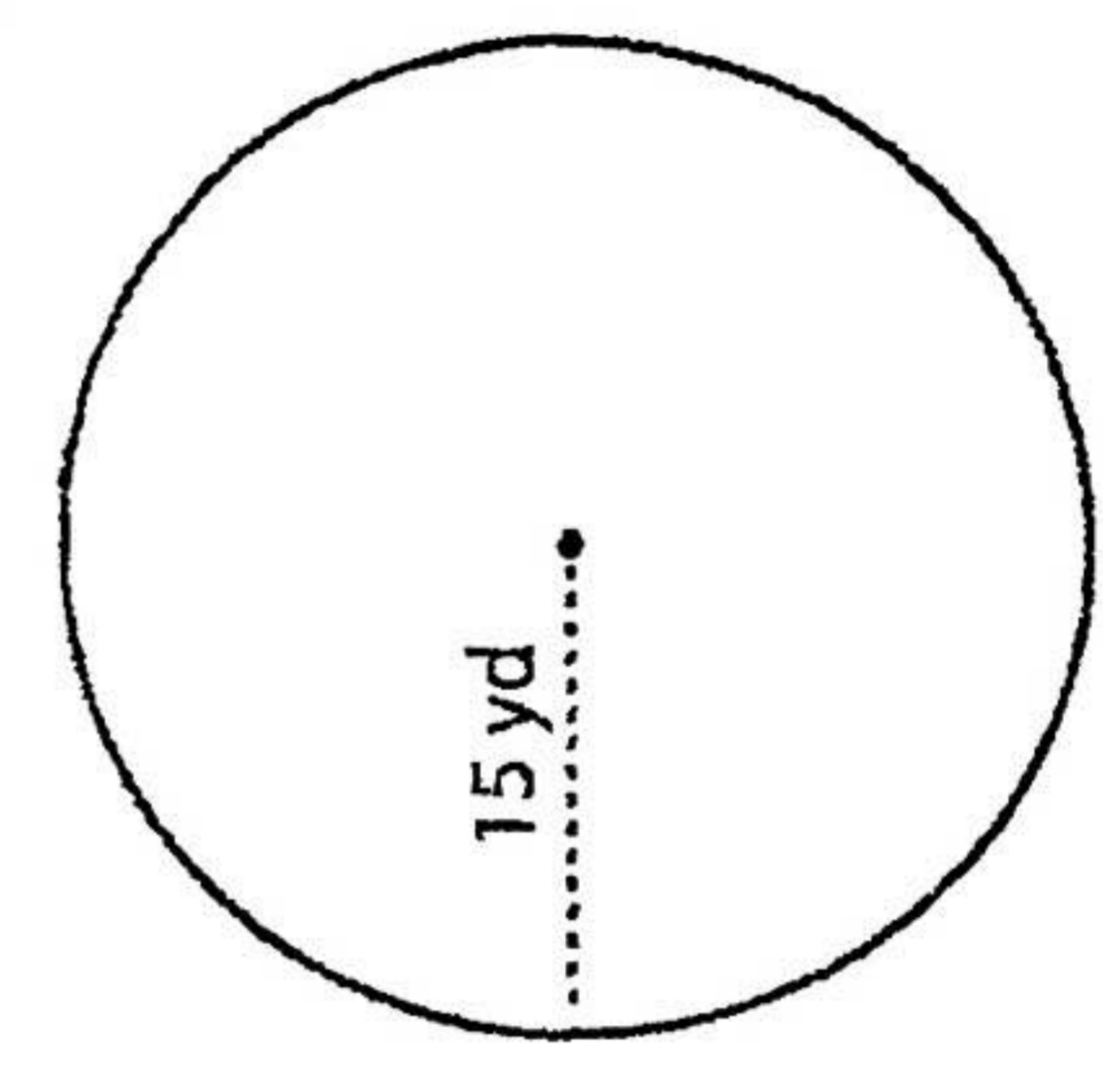
Circumference =

2)



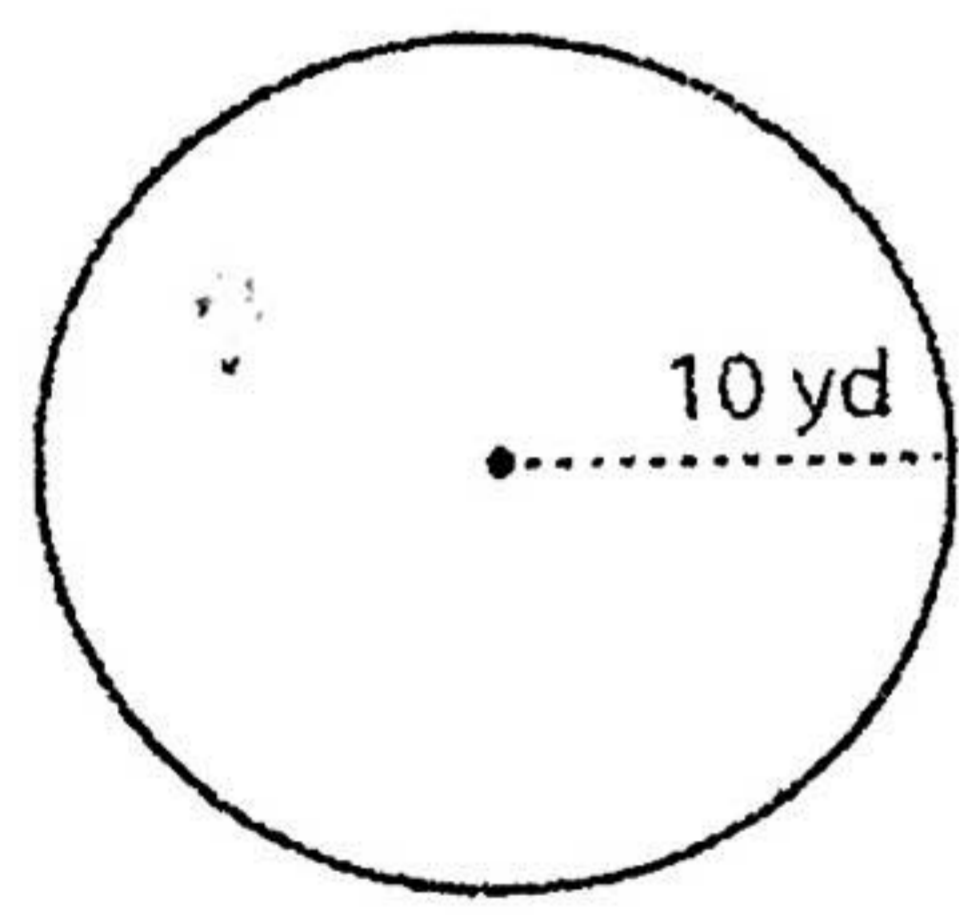
Circumference =

3)



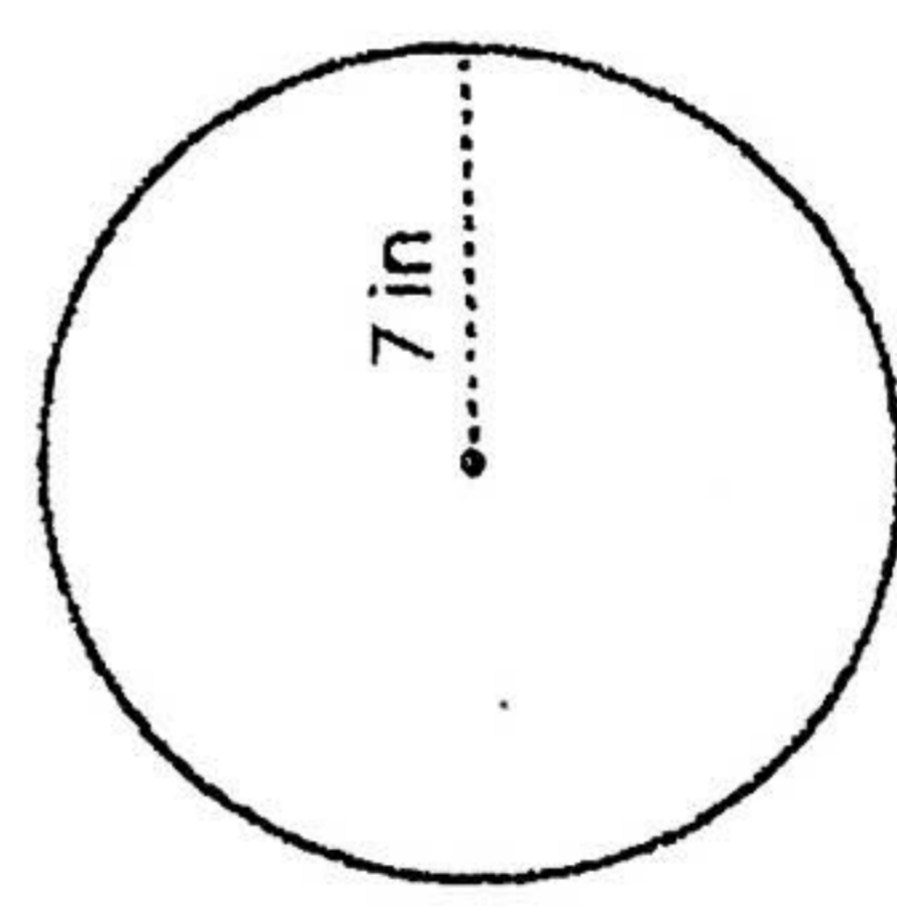
Circumference =

4)



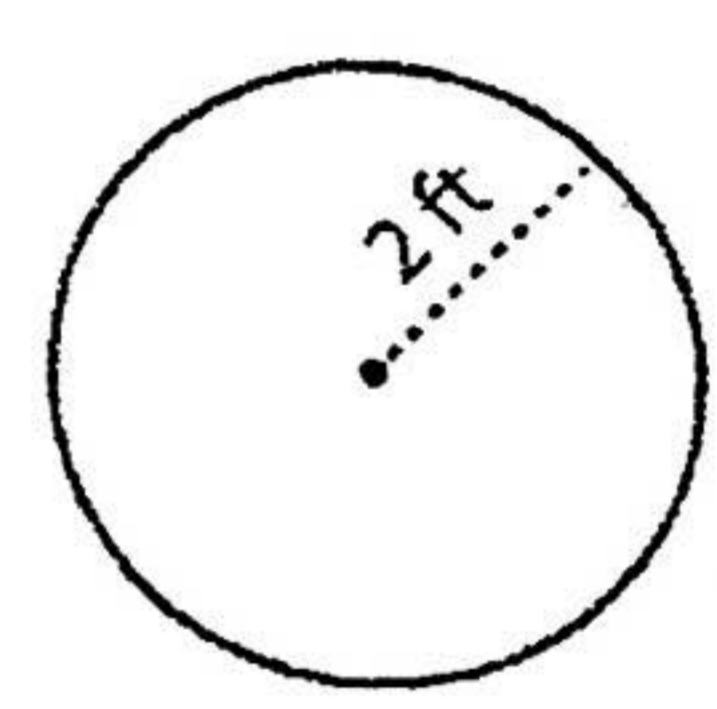
Circumference =

5)



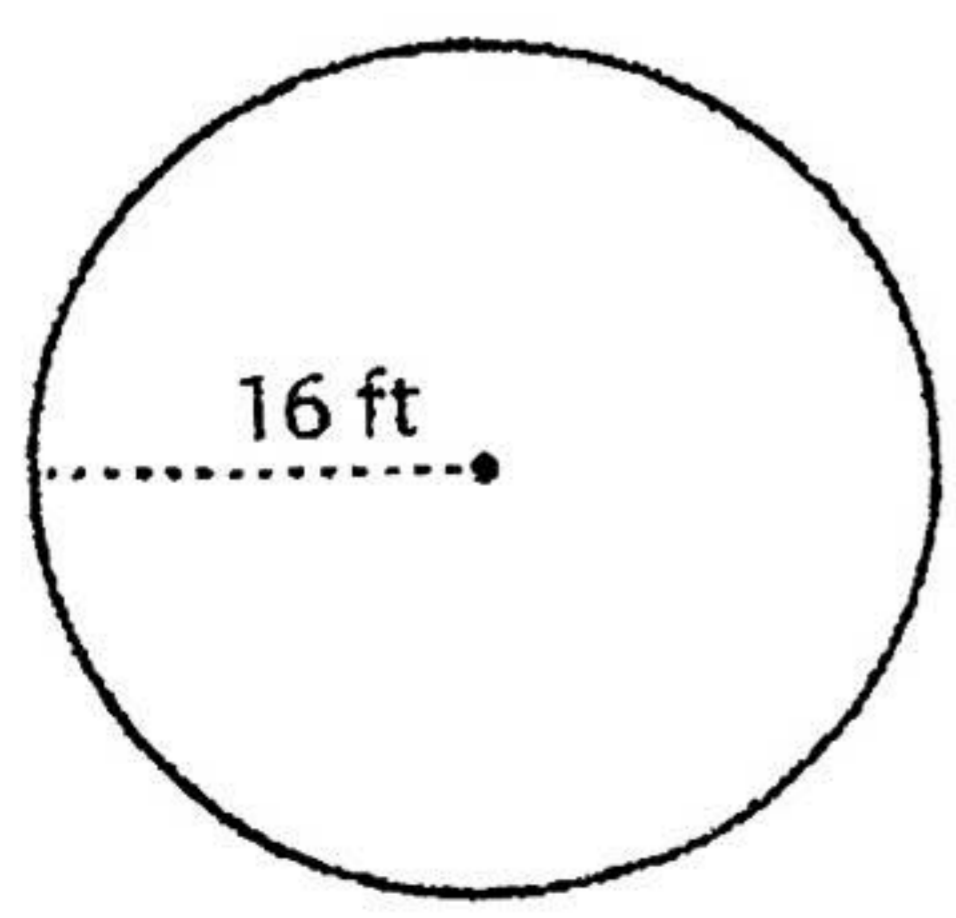
Circumference =

6)



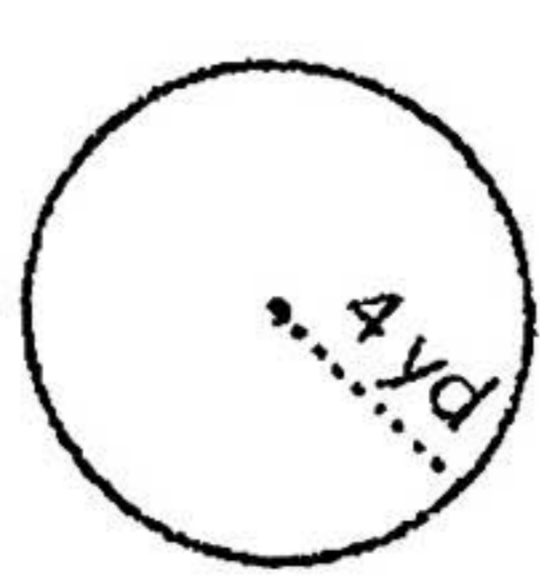
Circumference =

7)



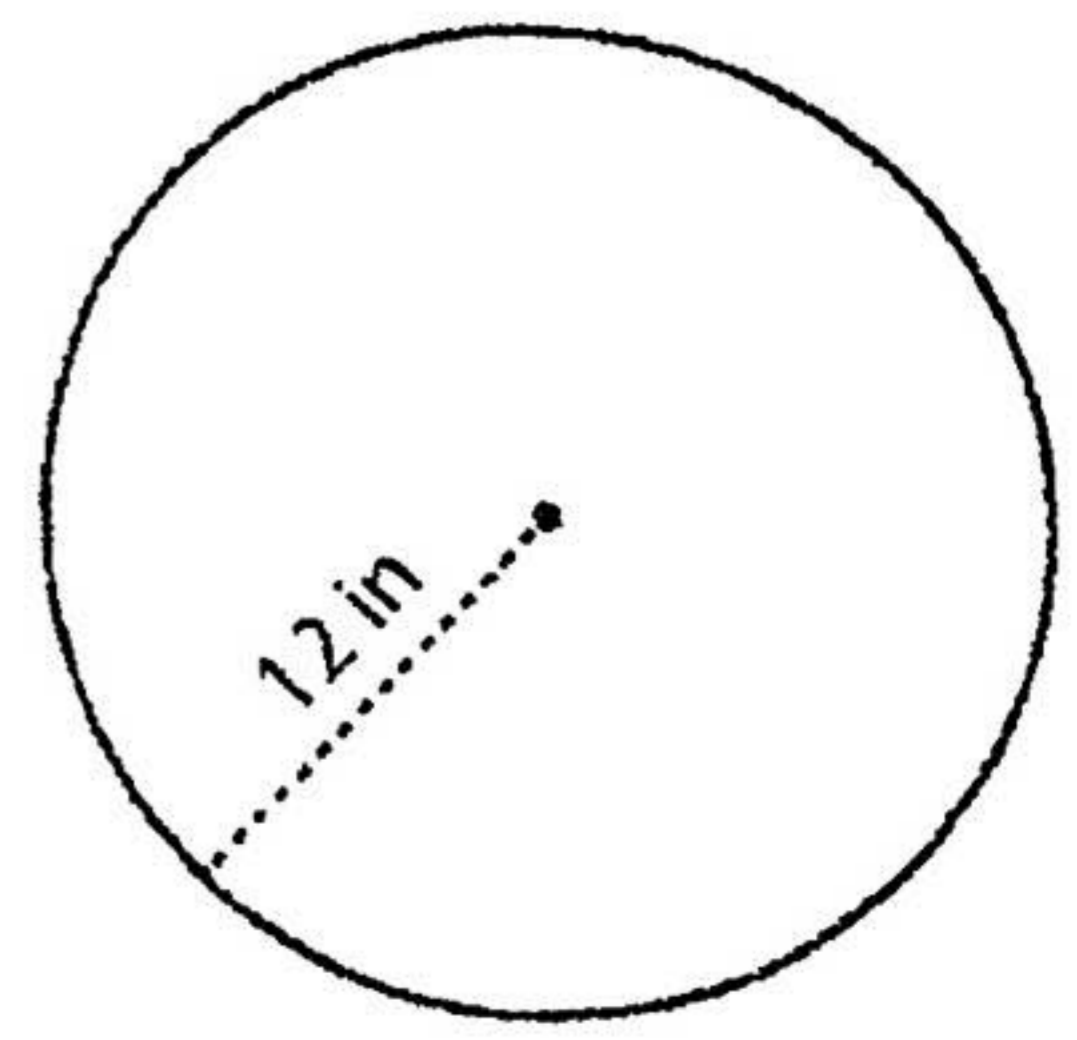
Circumference =

8)



Circumference =

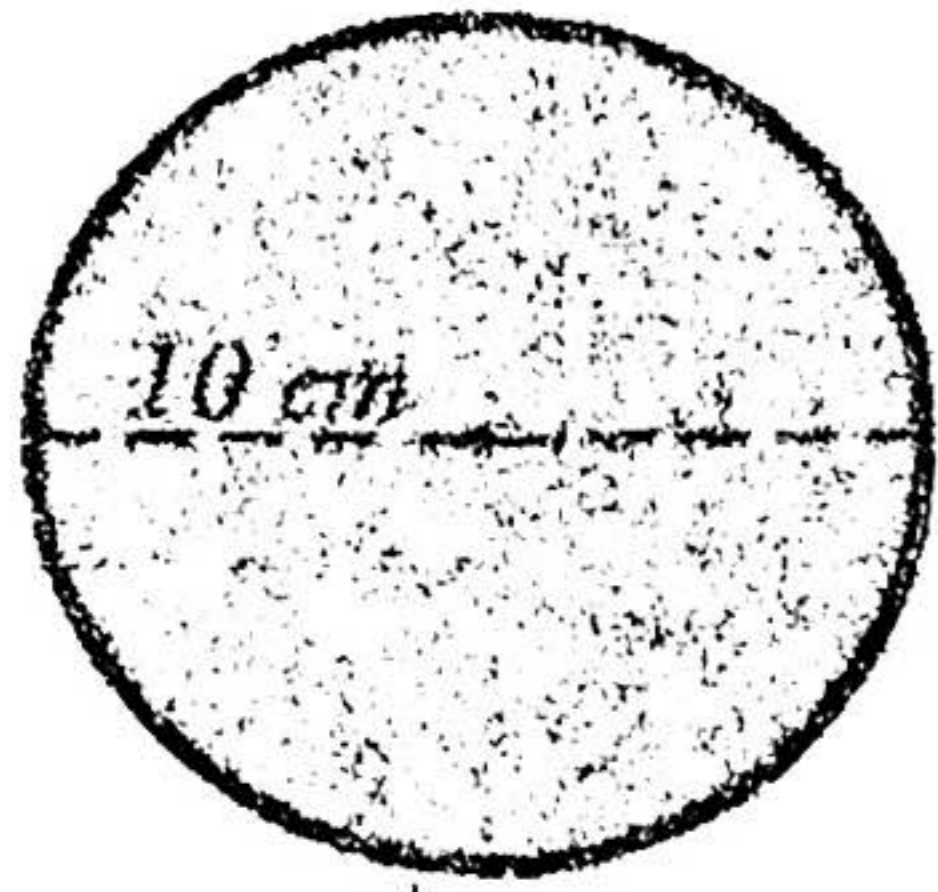
9)



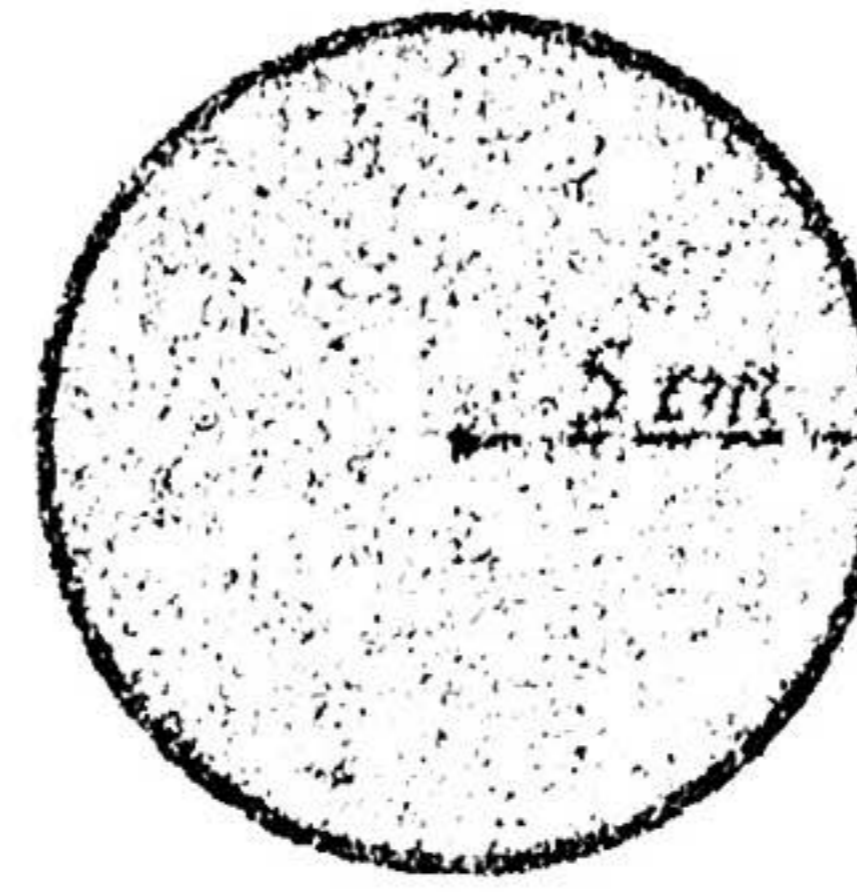
Circumference =

Name: \_\_\_\_\_

## Circumference of a Circle

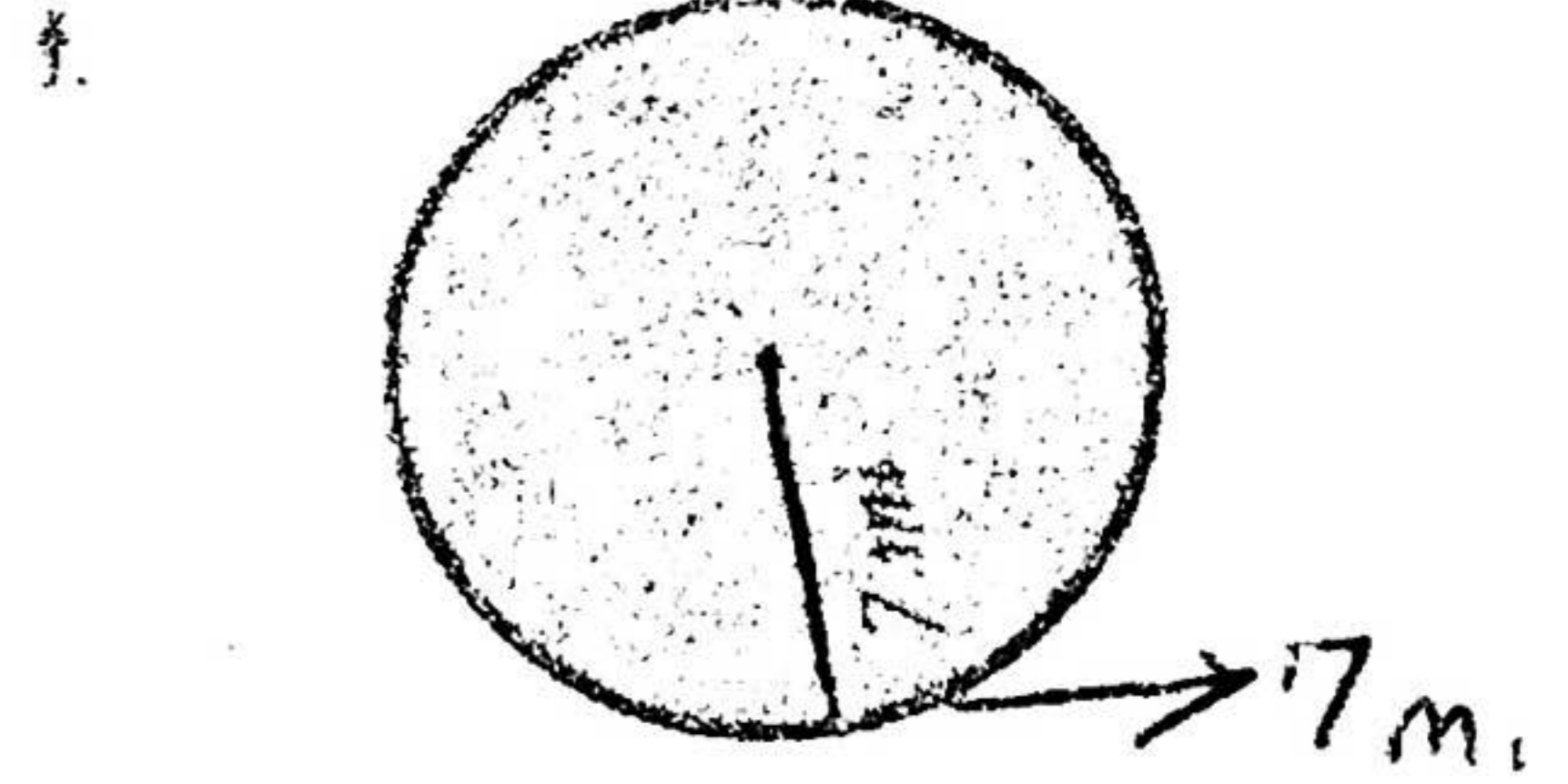
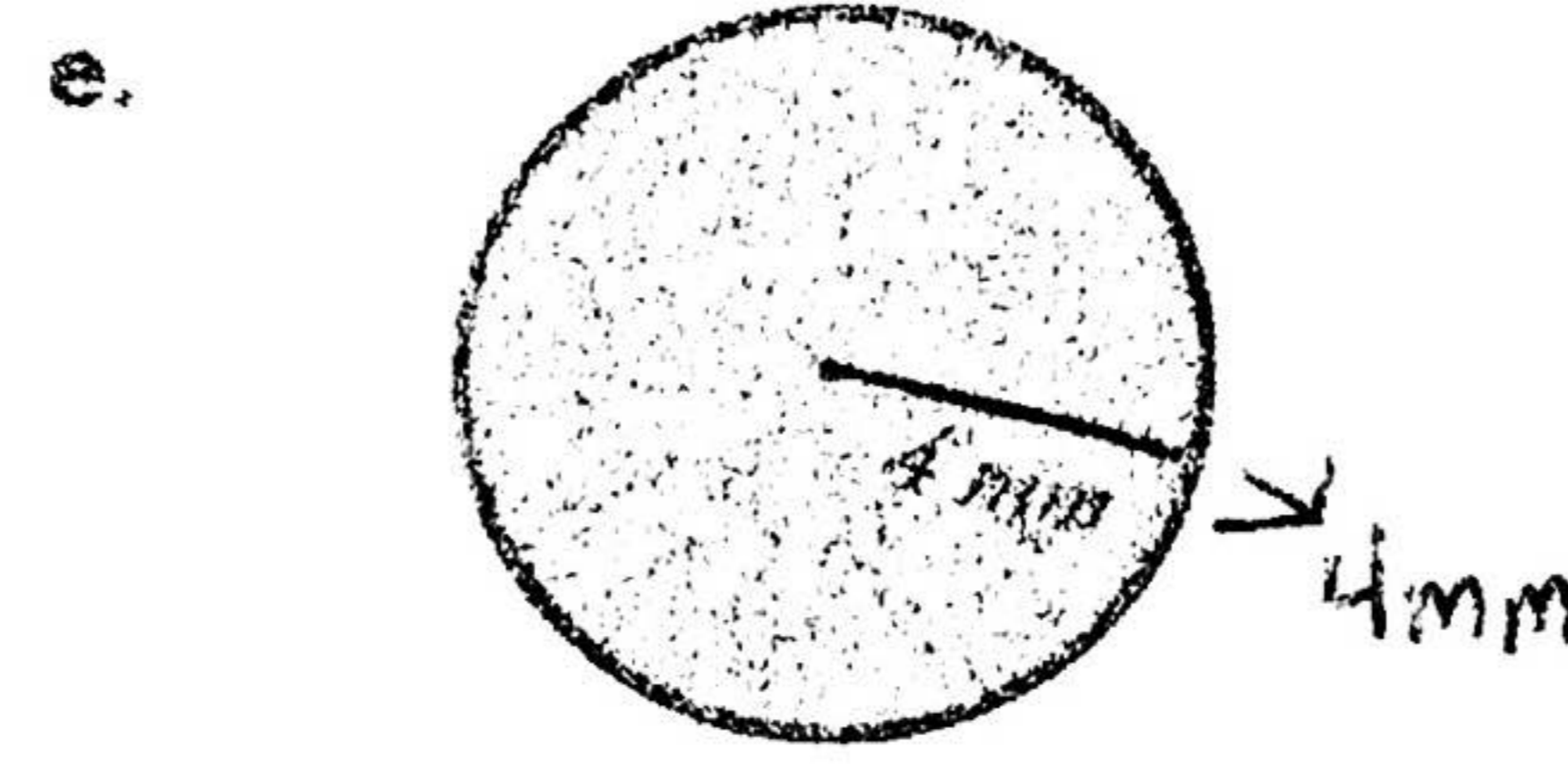
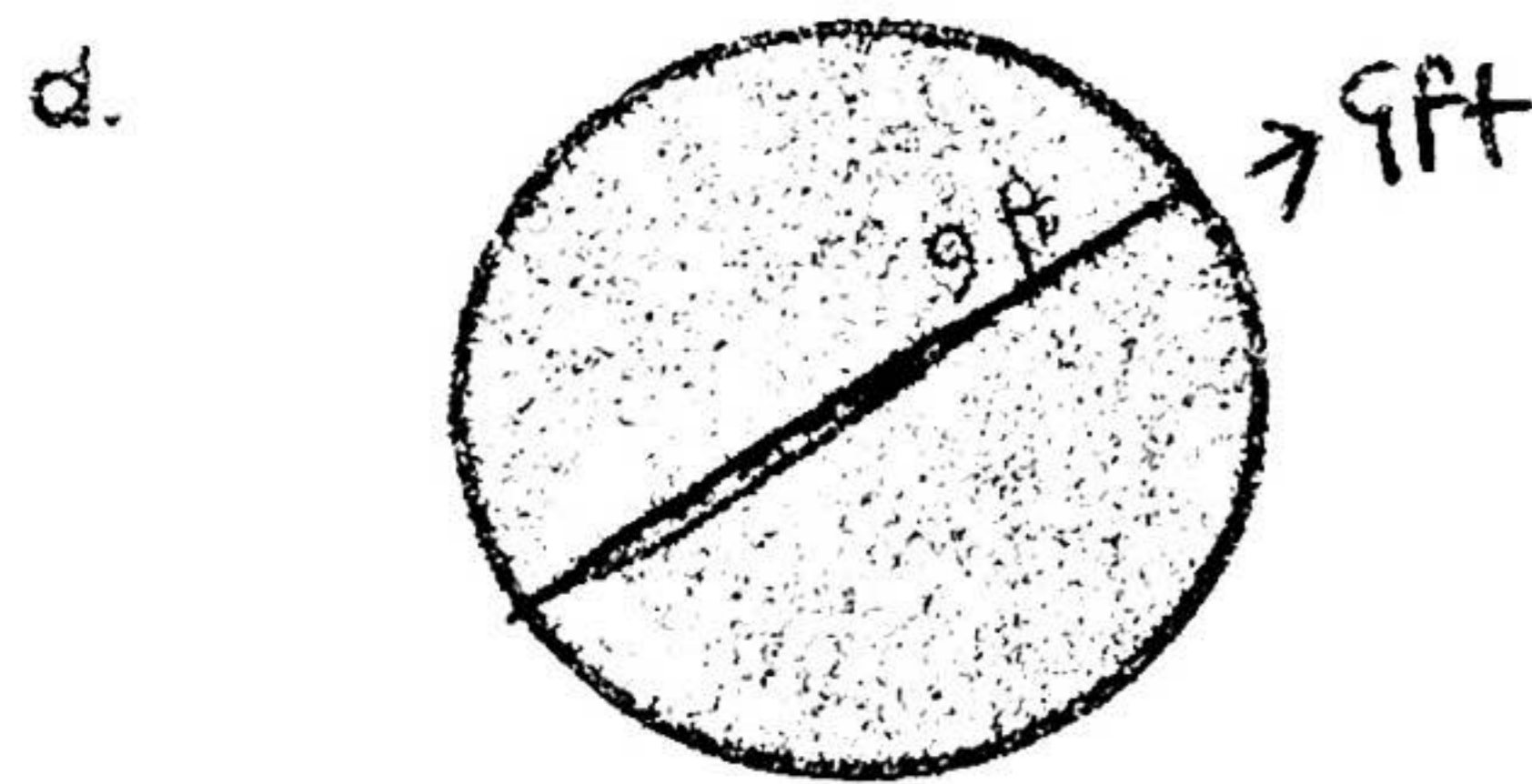
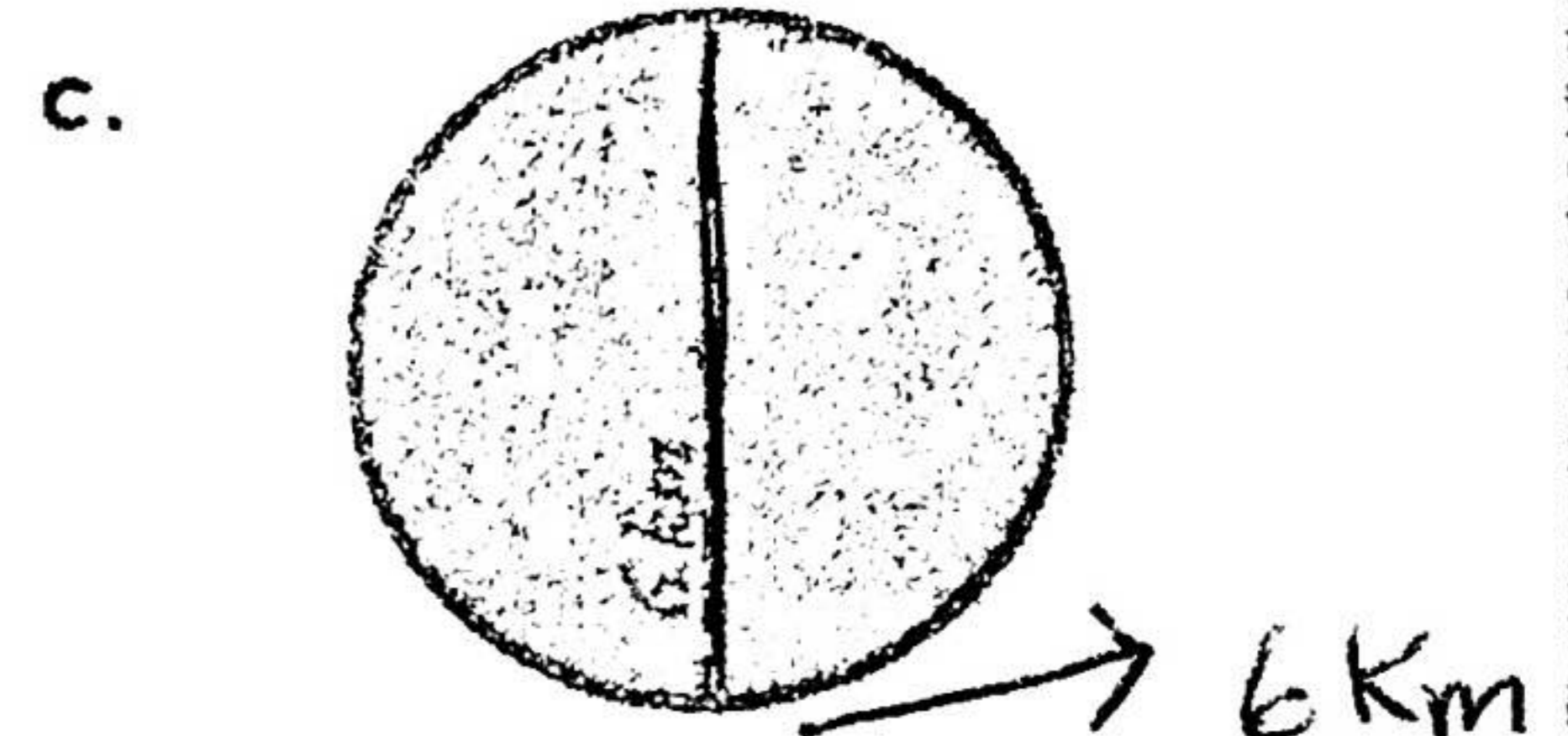
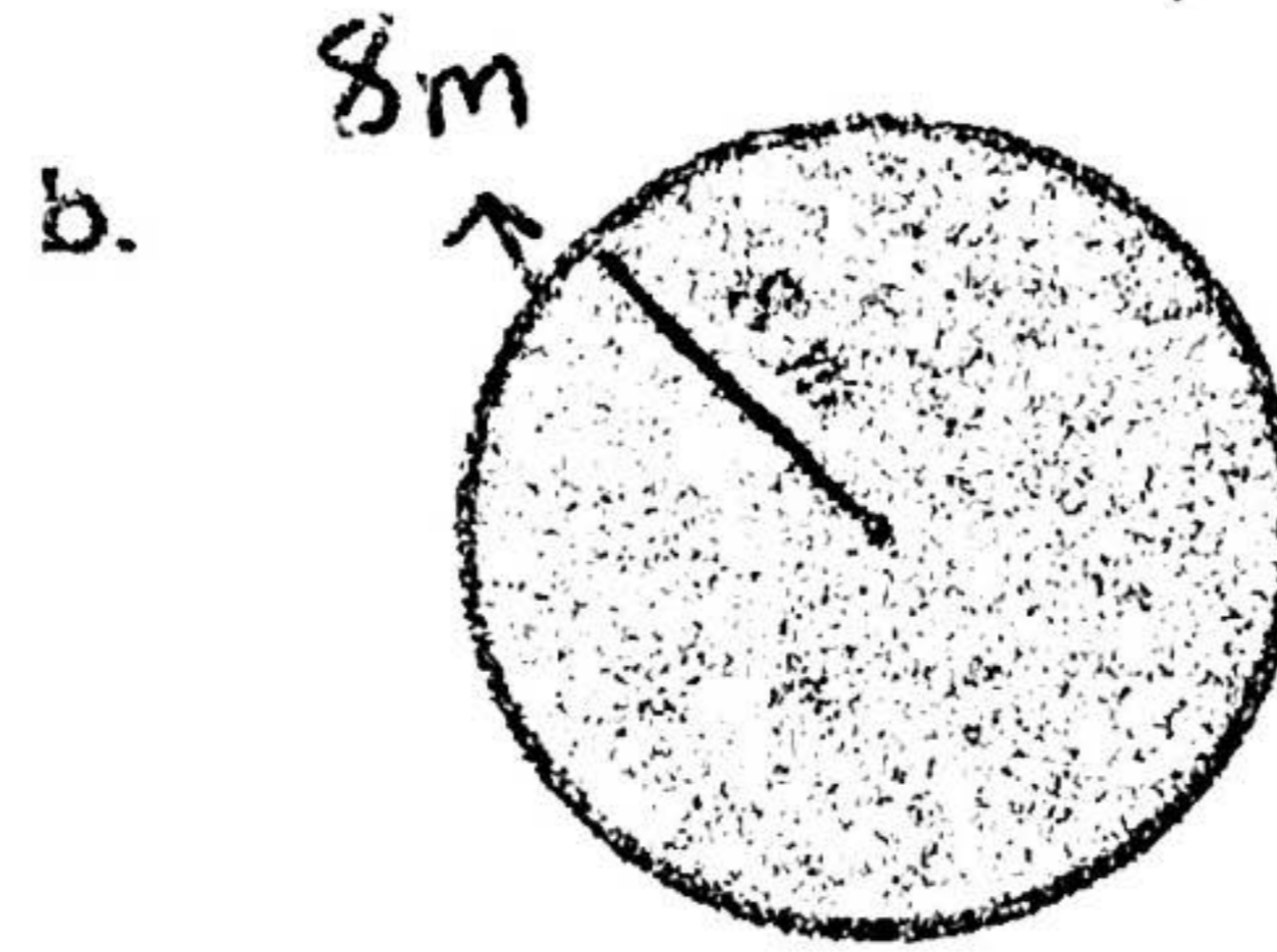
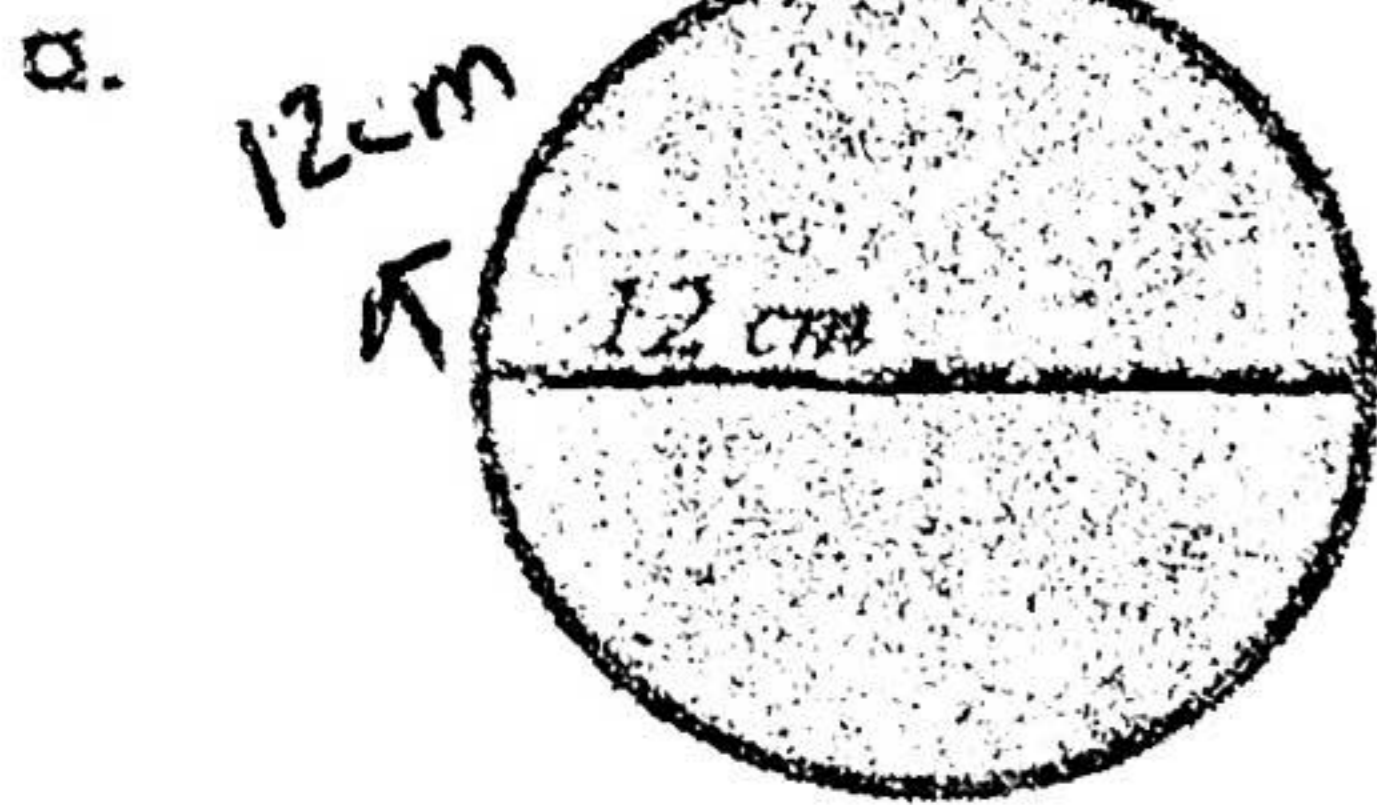


$$C = \pi \times d$$
$$d = 10 \text{ cm}$$
$$\pi \approx 3.14$$
$$3.14 \times 10 \text{ cm} = 31.4 \text{ cm}$$



$$C = 2 \times \pi \times r$$
$$r = 5 \text{ cm}$$
$$\pi \approx 3.14$$
$$2 \times 3.14 \times 5 \text{ cm} = 31.4 \text{ cm}$$

Find the circumference of each circle. Use 3.14 for pi.



Find the missing measurement for each circle.

g.  $r = 3 \text{ mm}$ ,  $d = 6 \text{ mm}$ ,  $C =$  \_\_\_\_\_

h.  $r = 10 \text{ in.}$ ,  $d =$  \_\_\_\_\_,  $C = 62.80 \text{ in.}$

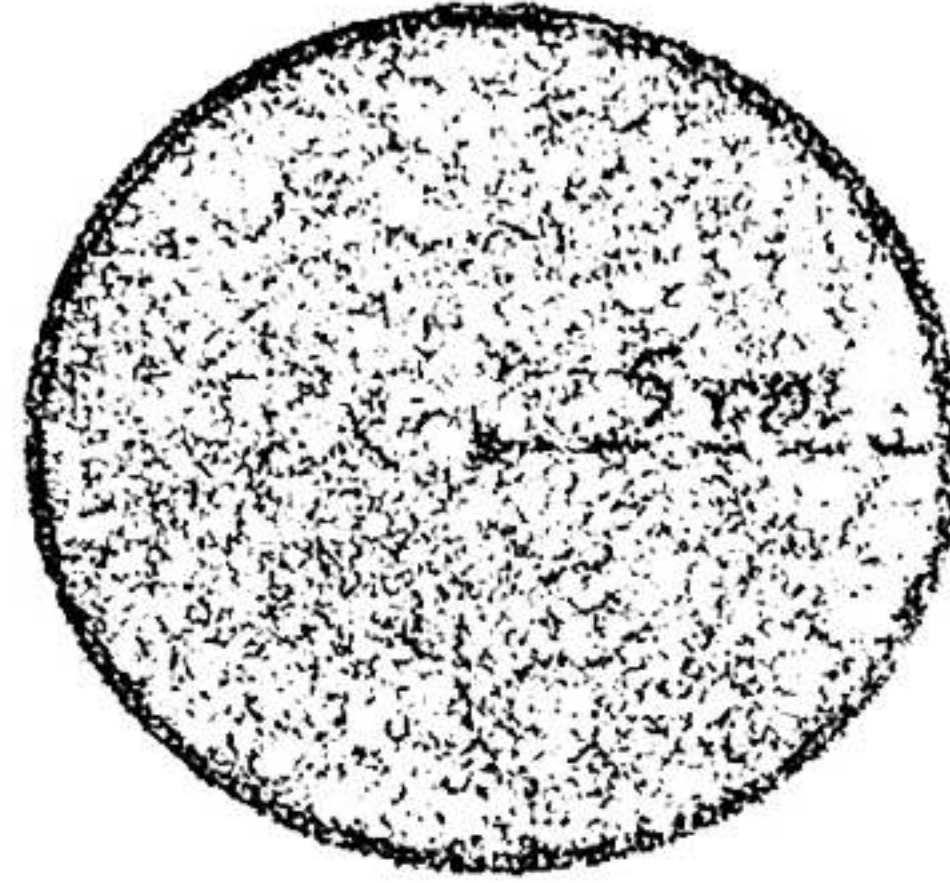
i.  $r =$  \_\_\_\_\_,  $d = 5 \text{ m}$ ,  $C = 15.70 \text{ m}$

j.  $r = 2 \text{ ft}$ ,  $d =$  \_\_\_\_\_,  $C =$  \_\_\_\_\_

Name: \_\_\_\_\_

## Circumference of a Circle

To find the circumference of a circle, use the formula  $2 \times \pi \times \text{radius} = \text{circumference}$ . This formula is often written as  $C = 2 \times \pi \times r$ .



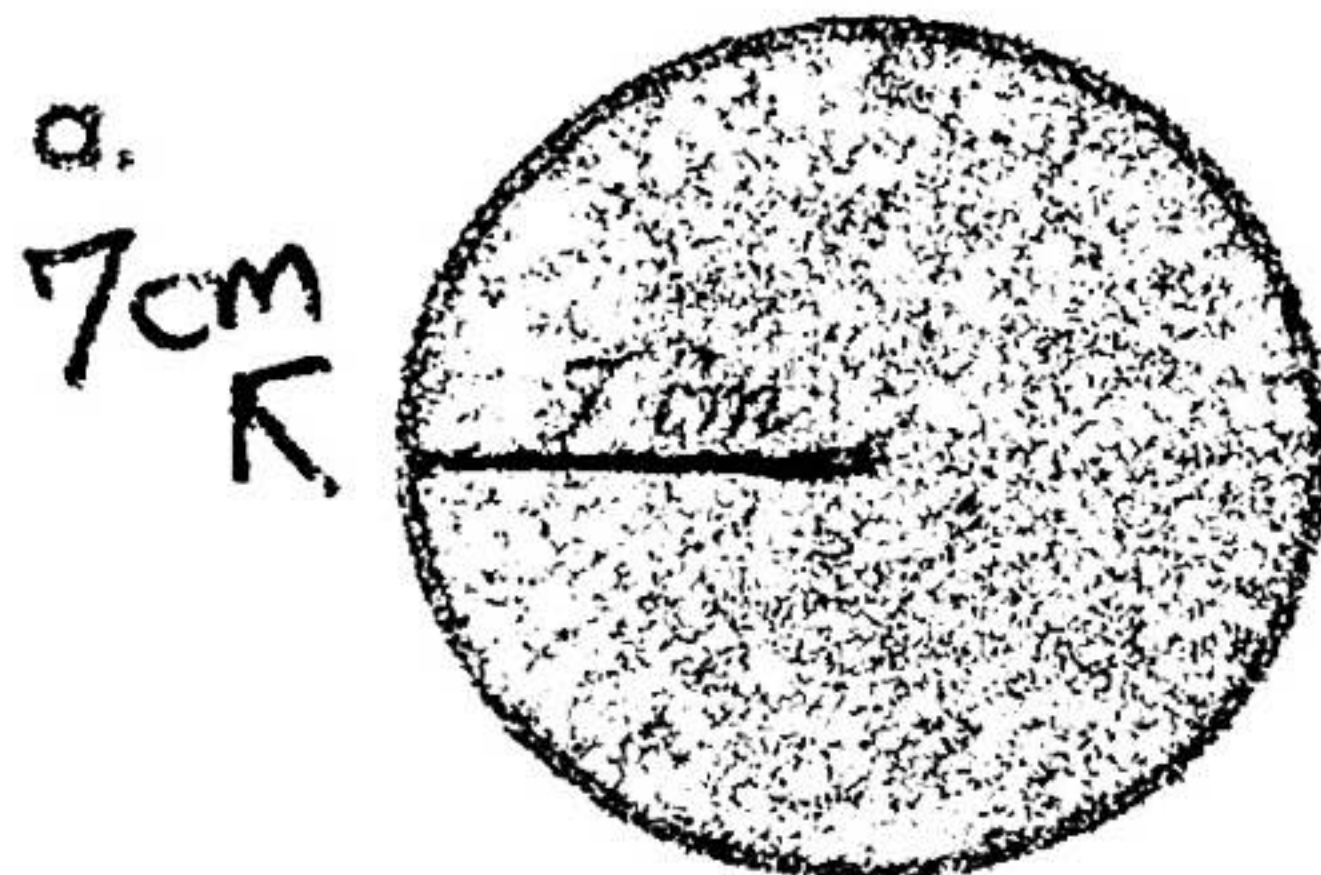
The circle pictured here has a radius of 5 cm.

$$r = 5 \text{ cm}$$

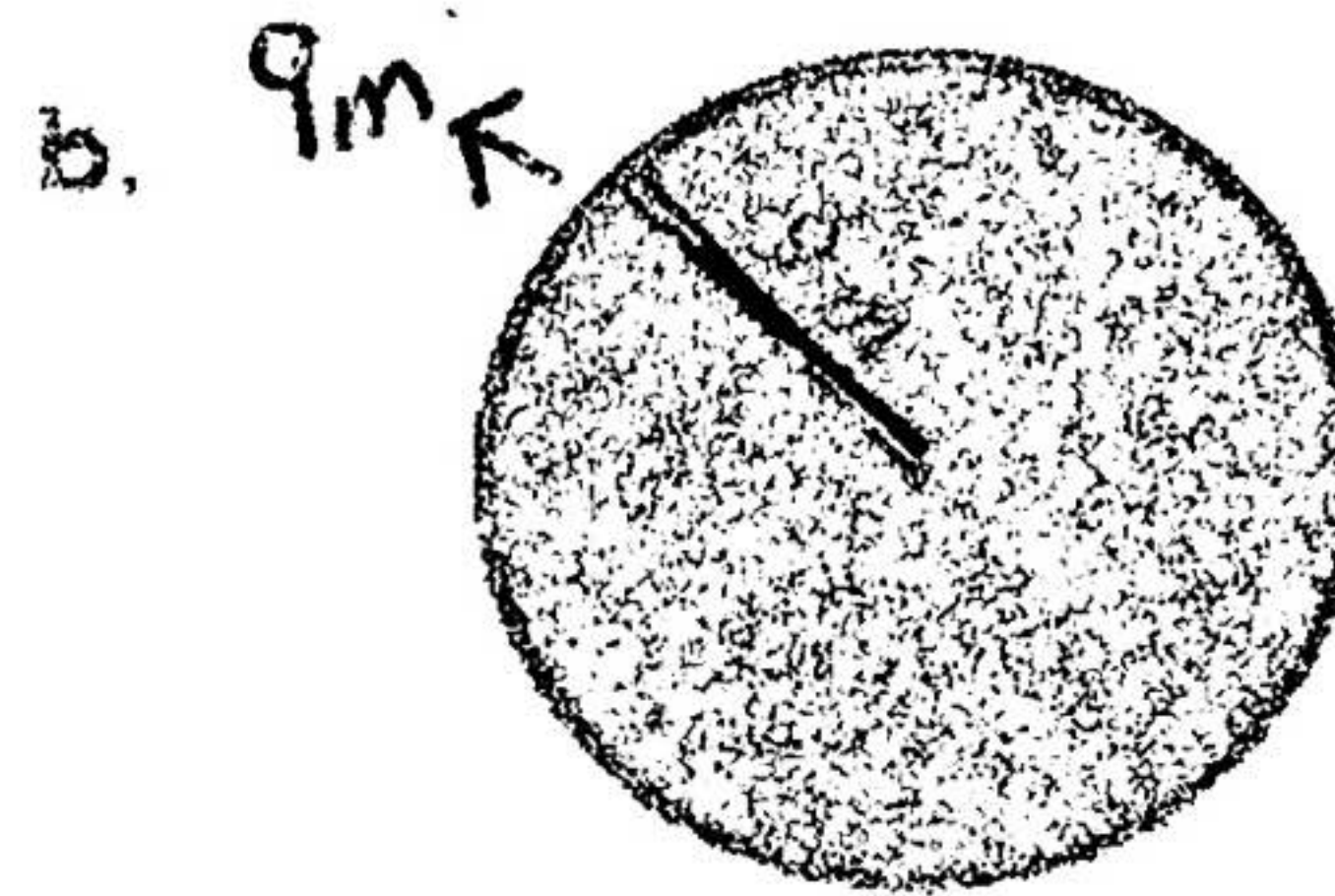
$$\pi \approx 3.14$$

$$2 \times 3.14 \times 5 \text{ cm} = 31.4 \text{ cm}$$

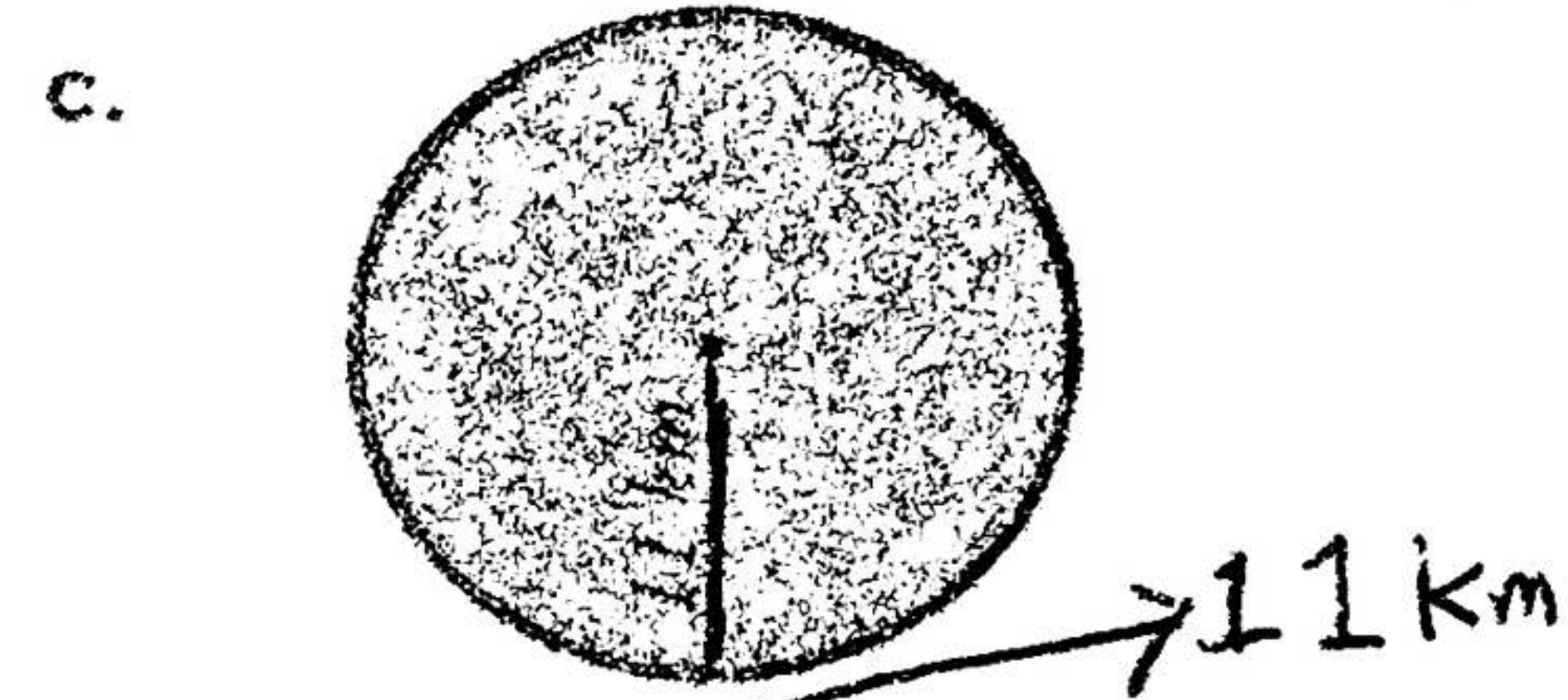
Find the circumference of each circle. Use 3.14 for pi.



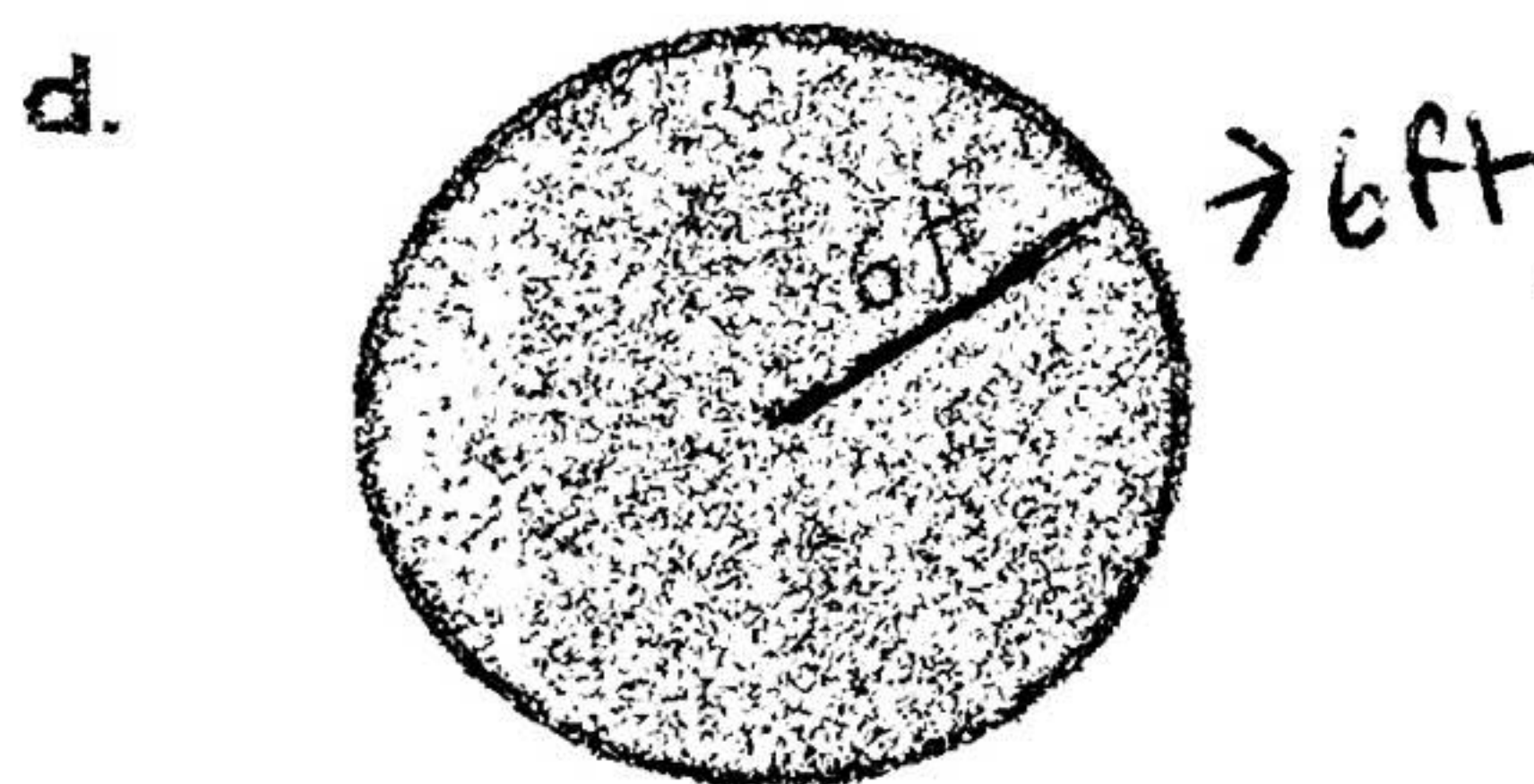
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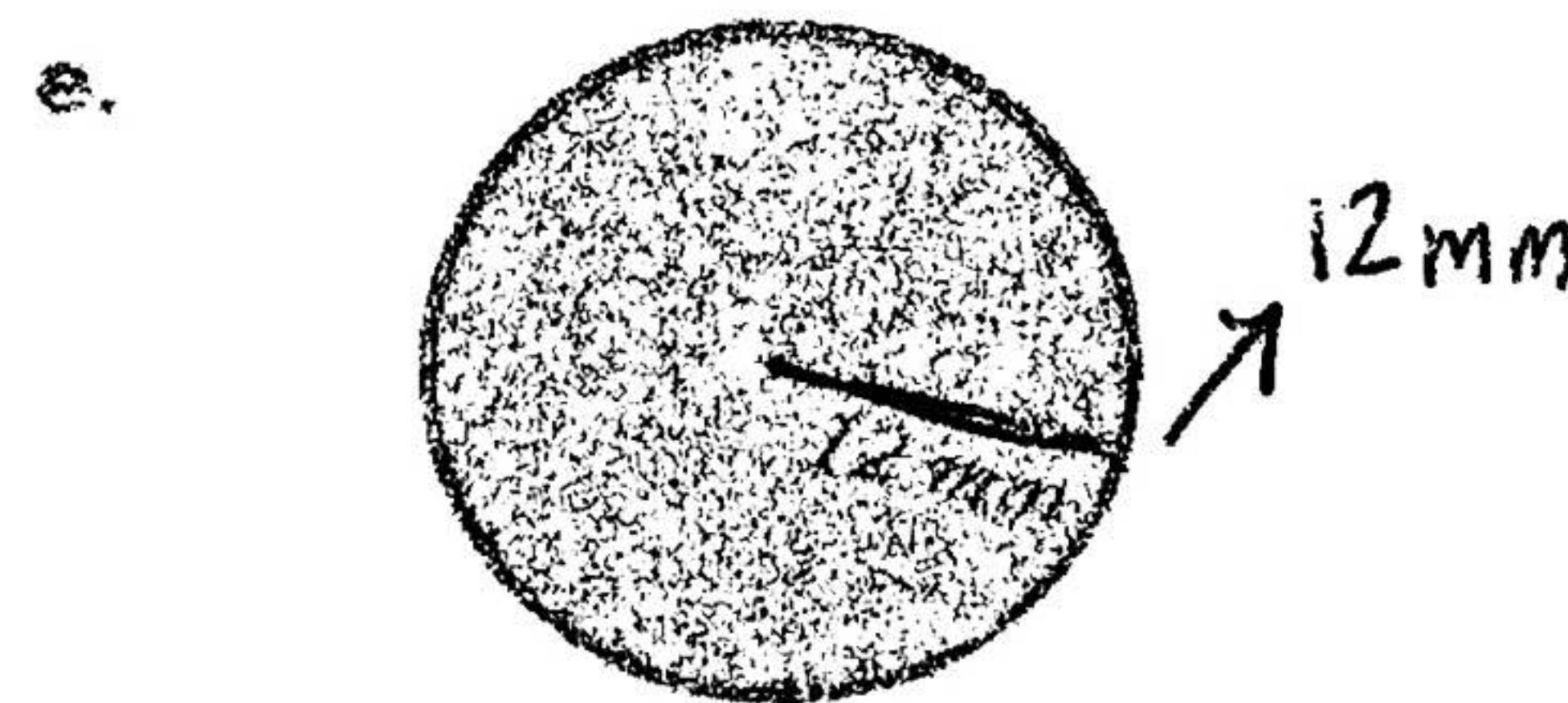
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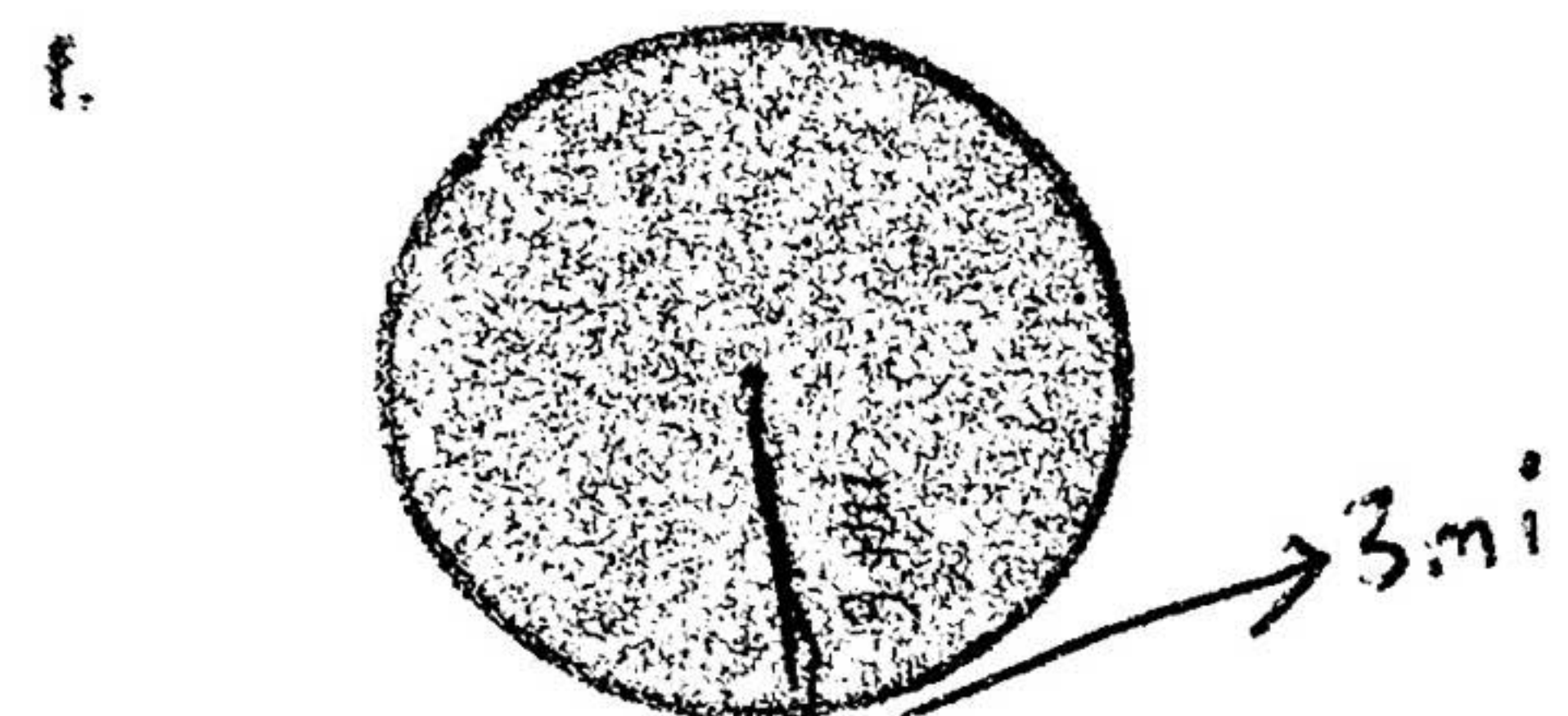
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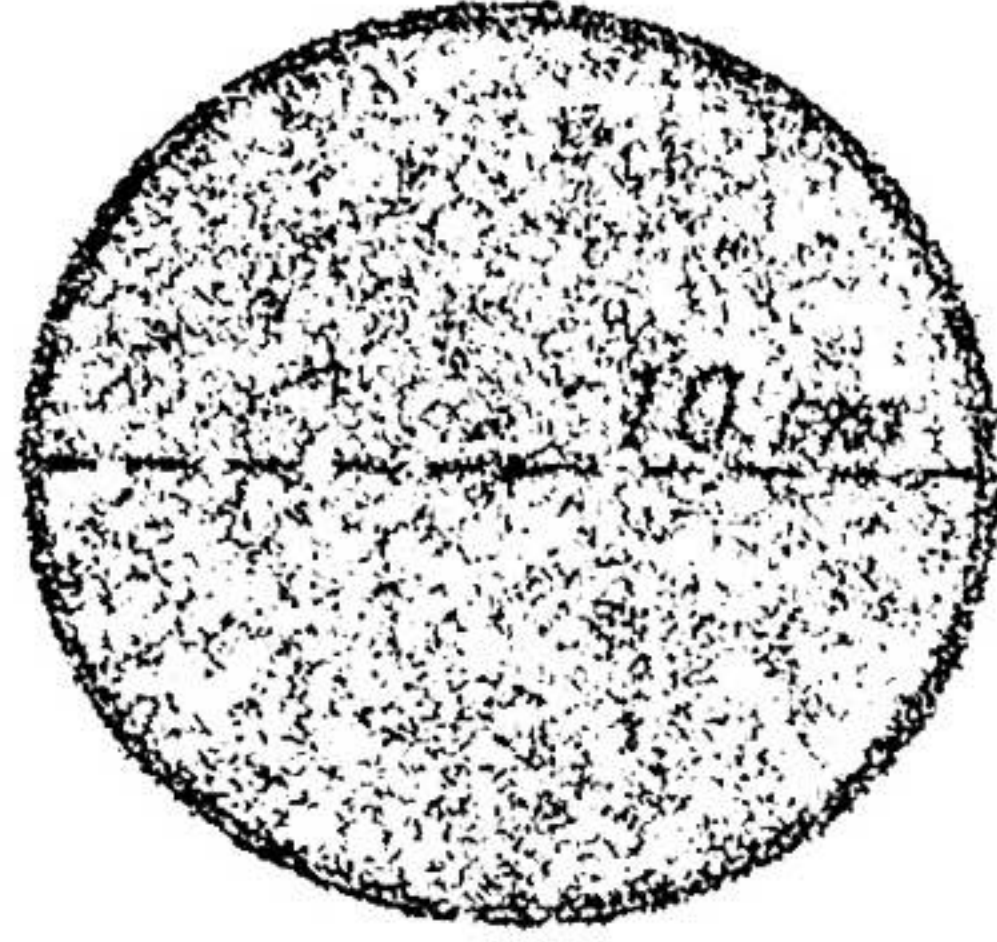
\_\_\_\_\_

- g. Mr. Tobias is buying new tires for his bike. He wants to make sure the new tires will fit on his bike but the only measurement he has is the radius of 13 inches. What is the circumference of the new tires?

\_\_\_\_\_

# Circumference of a Circle

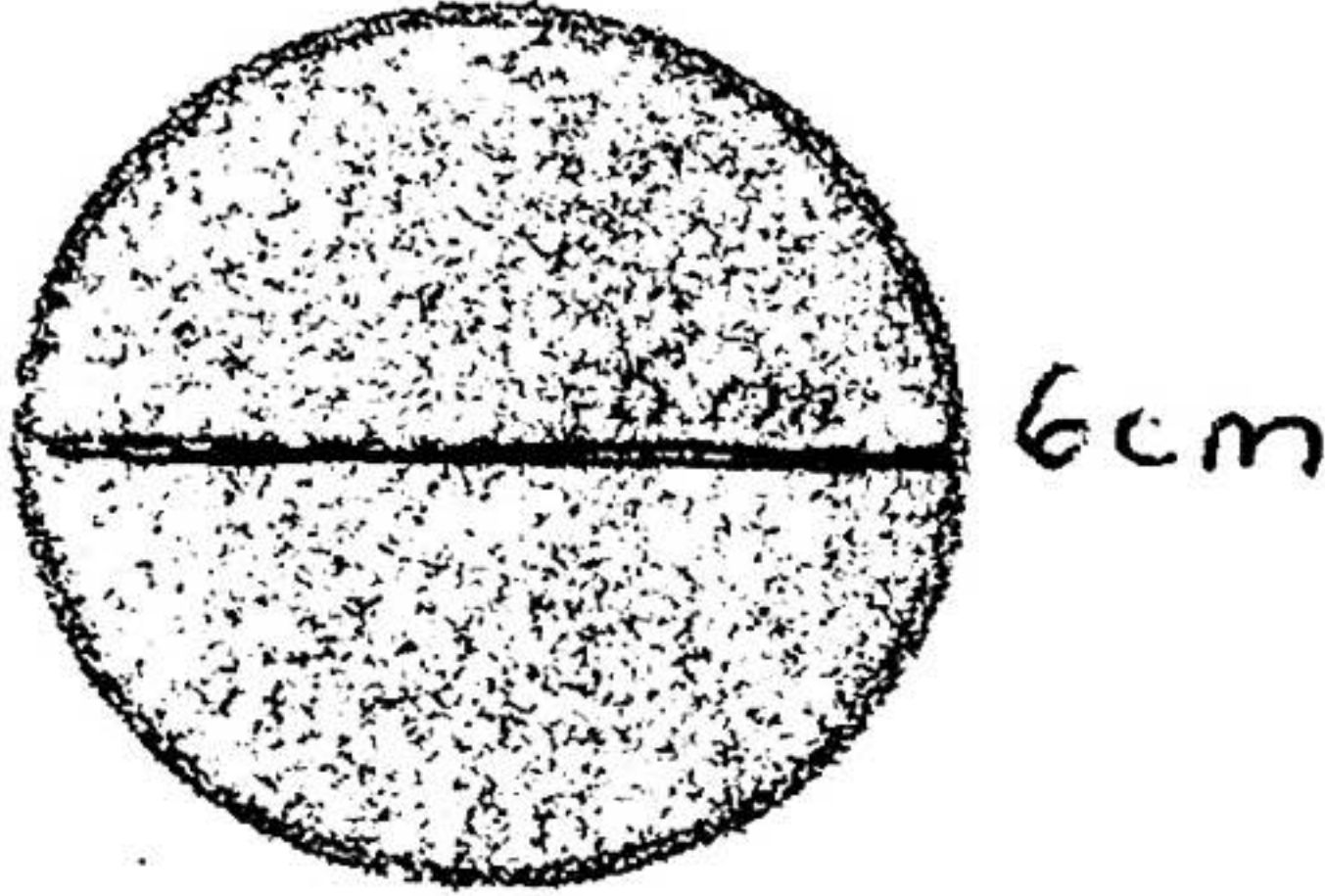
To find the circumference of a circle, use the formula  $\pi \times \text{diameter} = \text{circumference}$ . This formula is often written as  $C = \pi \times d$ .



The circle pictured here has a diameter of 10 cm.  
 $d = 10 \text{ cm}$   
 $\pi \approx 3.14$   
 $10 \text{ cm} \times 3.14 = 31.4 \text{ cm}$

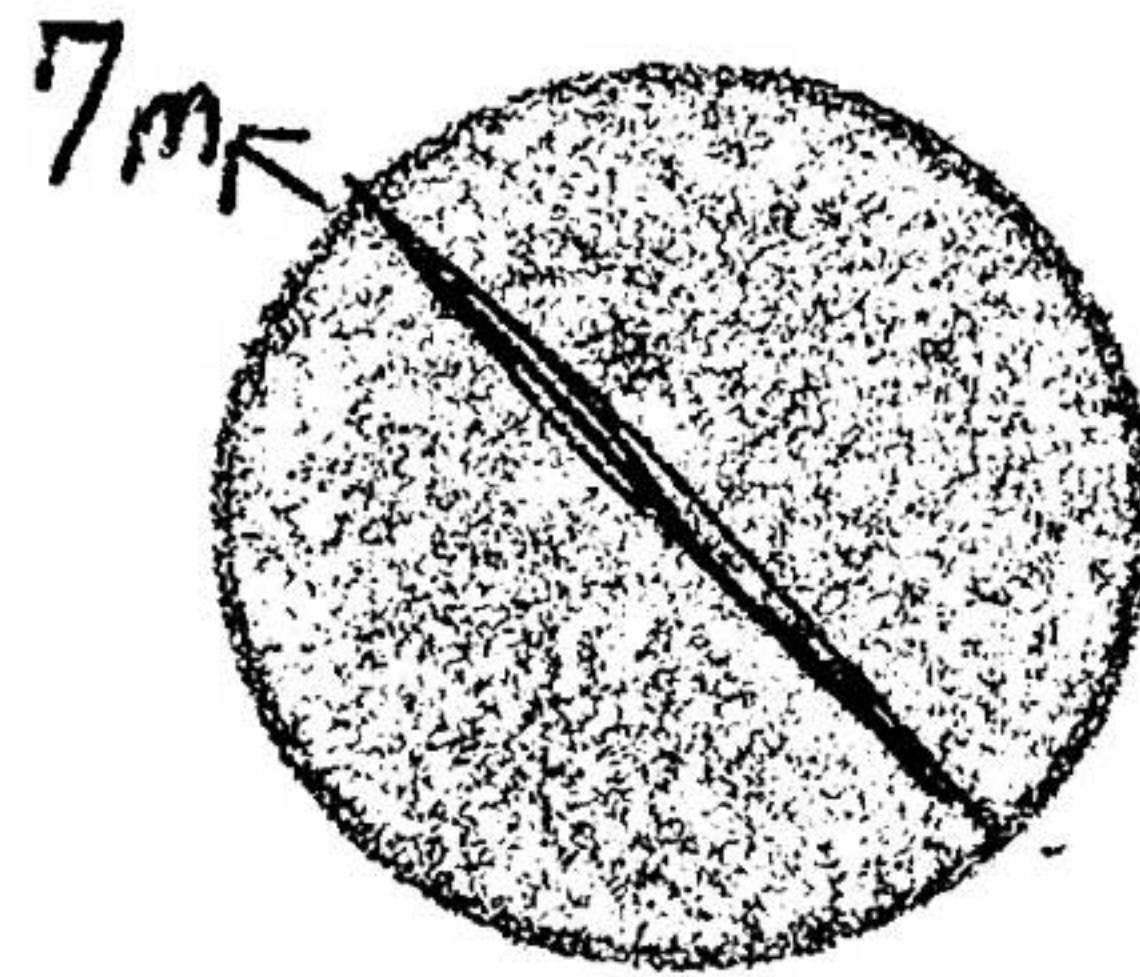
Find the circumference of each circle. Use 3.14 for pi

a.



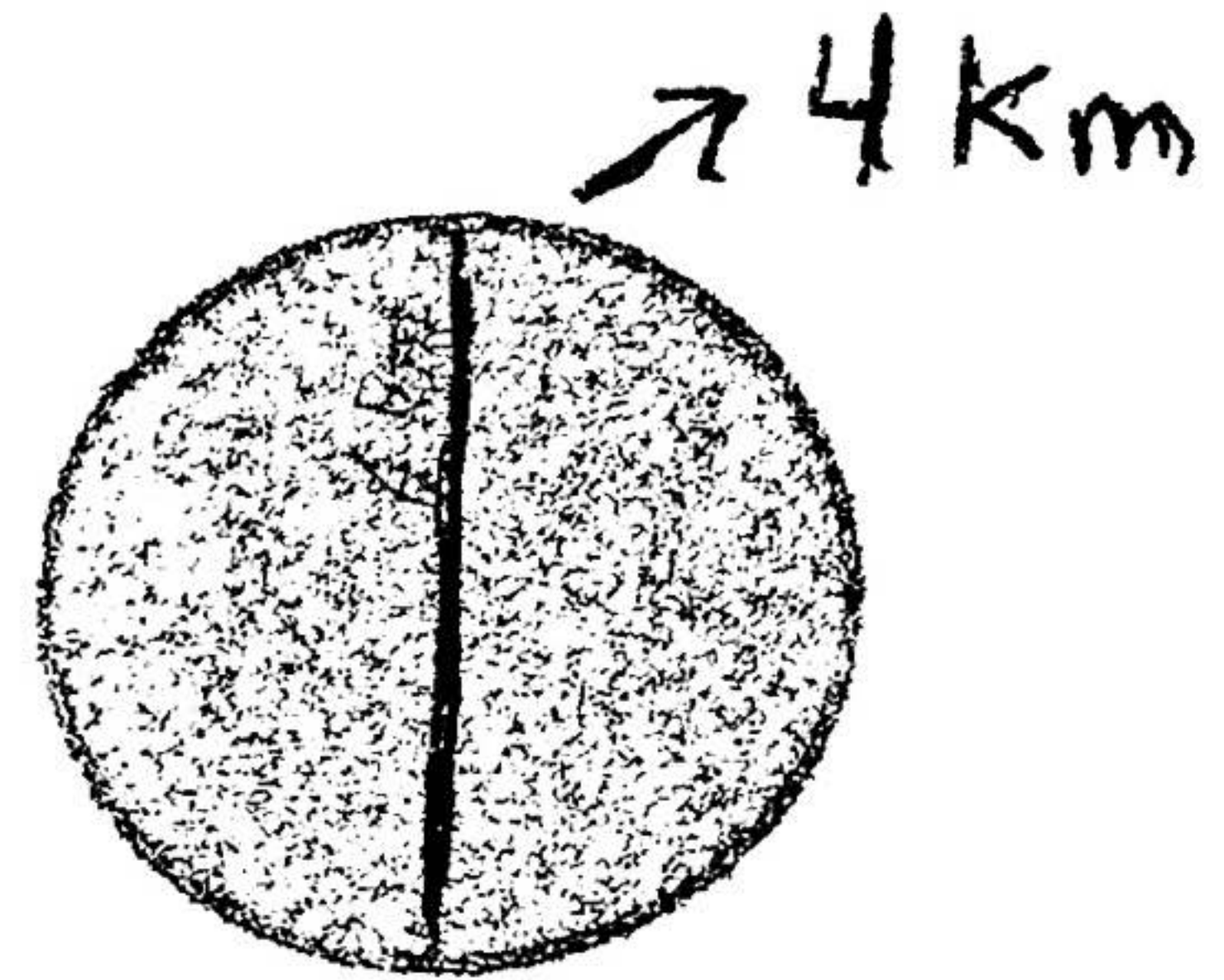
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b.



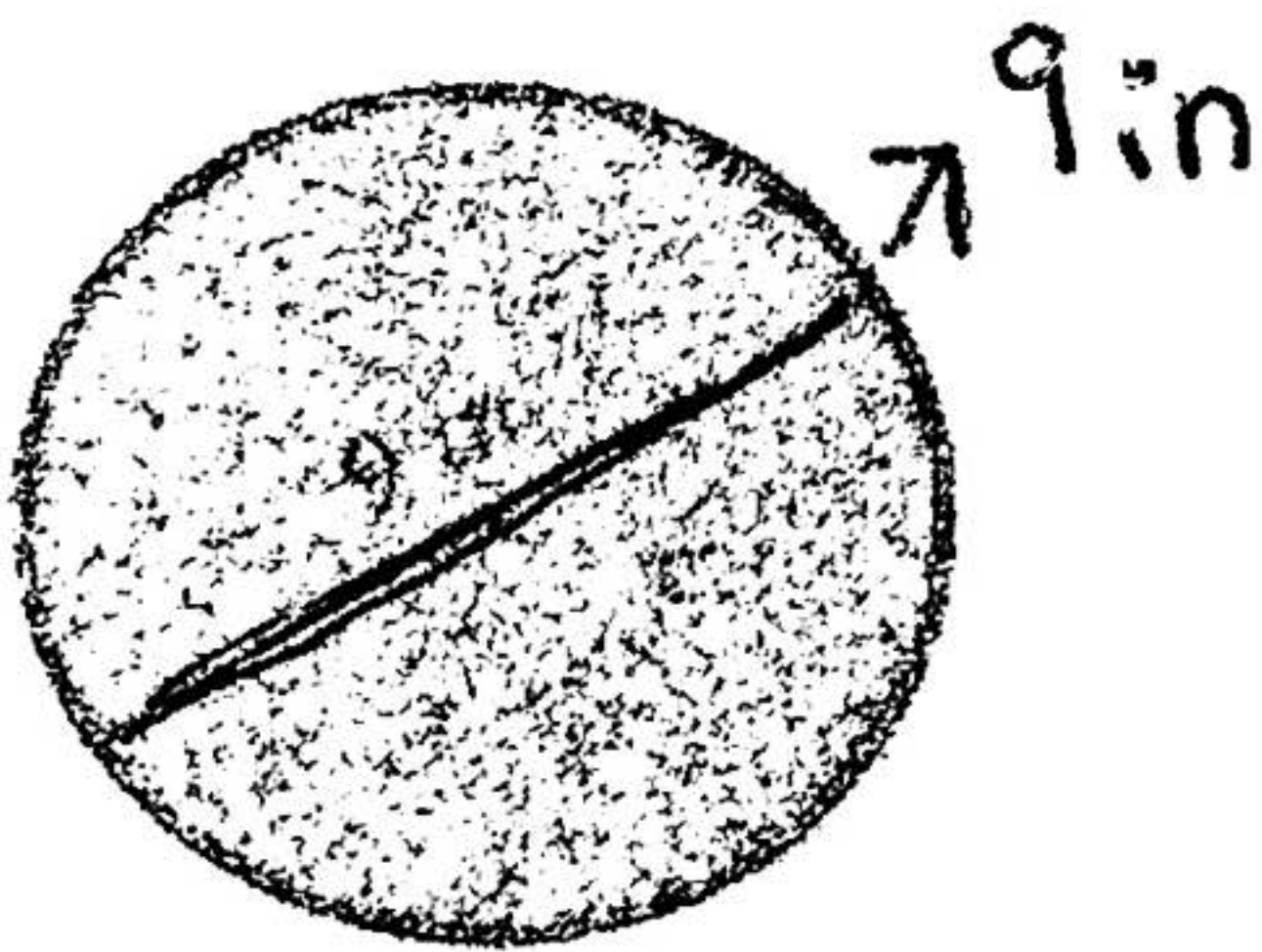
\_\_\_\_\_

c.



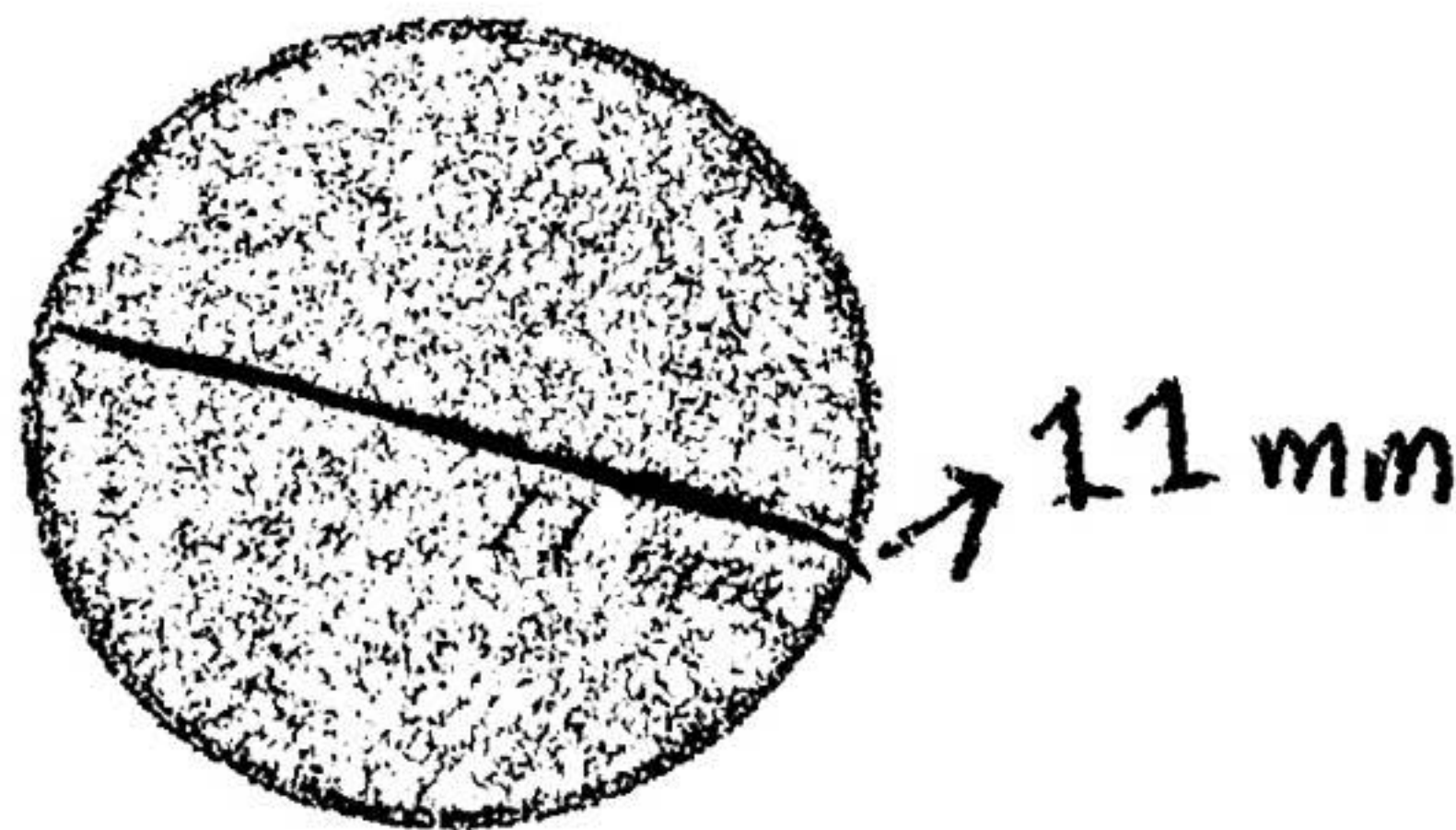
\_\_\_\_\_

d.



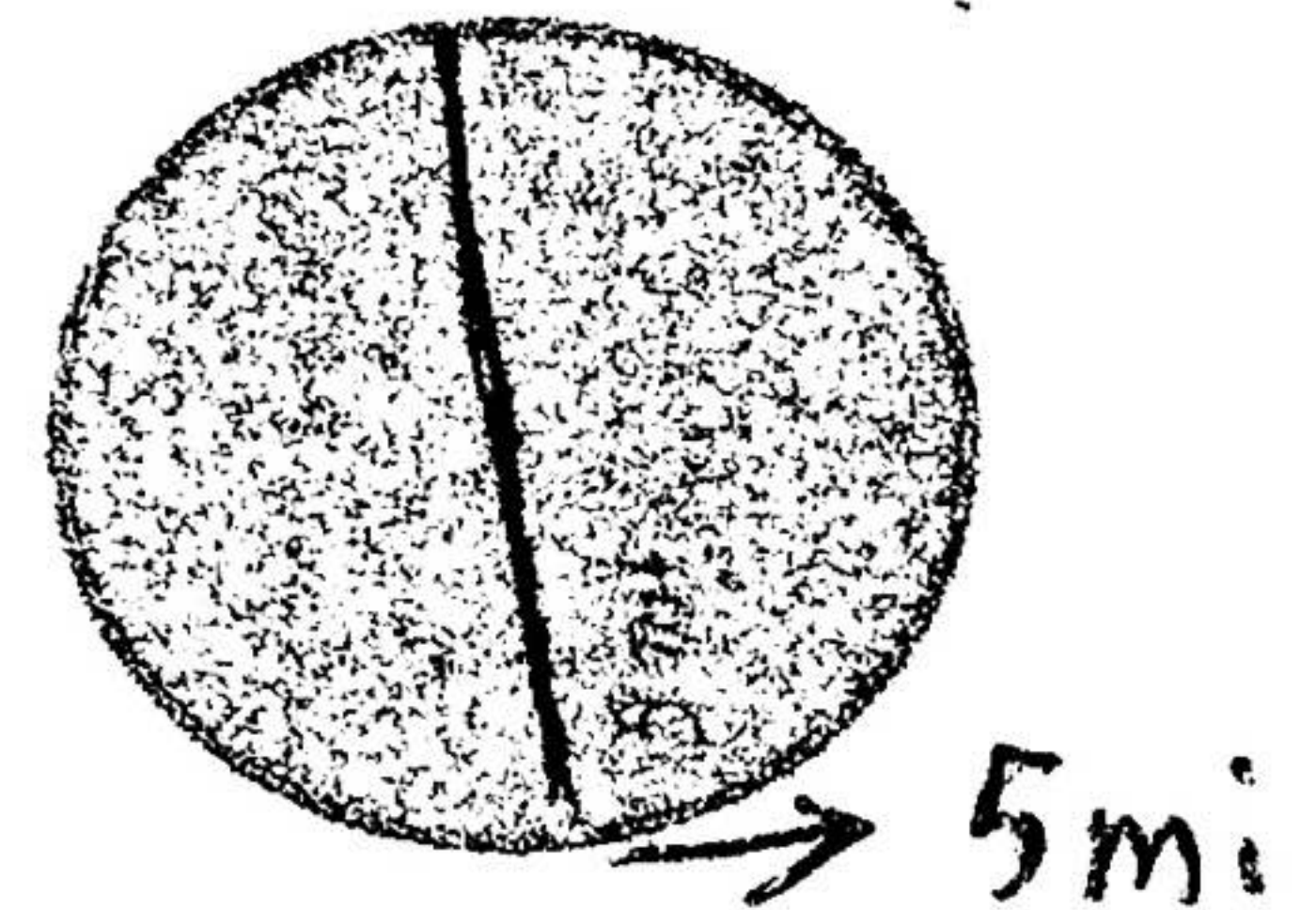
\_\_\_\_\_

e.



\_\_\_\_\_

f.



\_\_\_\_\_

g. Karla and Jeremy have a circular pool with a diameter of 12 feet. What is the circumference of the pool?

\_\_\_\_\_