Area of Circles
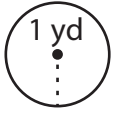

Find the area of the circle (Use $\pi = \frac{22}{7}$ or 3.14). Round the answer to the two decimal places.

Example 1

1 yd

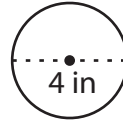Area of circle $= \pi r^2$

Radius (r) = 1 yd

Area $= 3.14 \times 1^2$

$= 3.14 \times 1$

$= \textbf{3.14 yd}^2$

Example 2

4 in

Area of circle $= \pi r^2$

Diameter (d) $= 2r$; $r = \frac{d}{2}$

Diameter (d) = 4 in ; r = 2 in

Area $= 3.14 \times 2^2 = 3.14 \times 4$

$= \textbf{12.56 in}^2$

Find the diameter and area of each circle (Use $\pi = \frac{22}{7}$ or 3.14). Round the answer to the two decimal places.

1) Radius = 7 in

Diameter = ⬭

Area = ⬭

2) Radius = 10 ft

Diameter = ⬭

Area = ⬭

3) Radius = 6.5 yd

Diameter = ⬭

Area = ⬭

Find the radius and area of each circle (Use $\pi = \frac{22}{7}$ or 3.14). Round the answer to the two decimal places.

1) Diameter = 8.8 ft

Radius = ⬭

Area = ⬭

2) Diameter = 17 yd
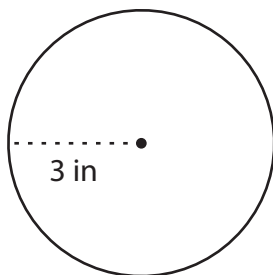
Radius = ⬭

Area = ⬭

3) Diameter = 24 in

Radius = ⬭

Area = ⬭

Find the area and radius/diameter of each circle (Use $\pi = \frac{22}{7}$ or 3.14). Round the answer to the two decimal places.
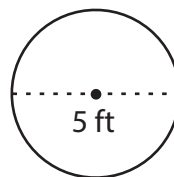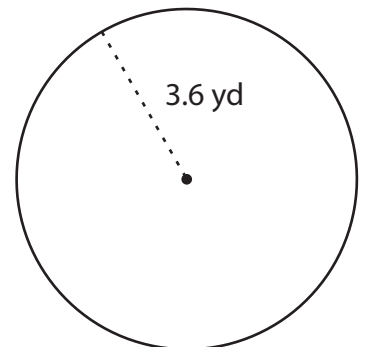
1)

3 in

Diameter = ⬭

Area = ⬭

2)

5 ft

Radius = ⬭

Area = ⬭

3)

3.6 yd

Diameter = ⬭

Area = ⬭

Area of Circles
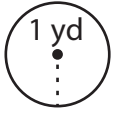
Answer key

Find the area of the circle (Use $\pi = \dfrac{22}{7}$ or 3.14). Round the answer to the two decimal places.

Example 1

1 yd

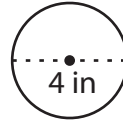Area of circle = πr^2

Radius (r) = 1 yd

Area = 3.14×1^2

= 3.14×1

= 3.14 yd²

Example 2

4 in

Area of circle = πr^2

Diameter (d) = 2r ; $r = \dfrac{d}{2}$

Diameter (d) = 4 in ; r = 2 in

Area = 3.14×2^2 = 3.14×4

= 12.56 in²

Find the diameter and area of each circle (Use $\pi = \dfrac{22}{7}$ or 3.14). Round the answer to the two decimal places.

1) Radius = 7 in

Diameter = **14 in**

Area = **153.86 in²**

2) Radius = 10 ft

Diameter = **20 ft**

Area = **314 ft²**

3) Radius = 6.5 yd

Diameter = **13 yd**

Area = **132.67 yd²**

Find the radius and area of each circle (Use $\pi = \dfrac{22}{7}$ or 3.14). Round the answer to the two decimal places.

1) Diameter = 8.8 ft

Radius = **4.4 ft**

Area = **60.79 ft²**

2) Diameter = 17 yd
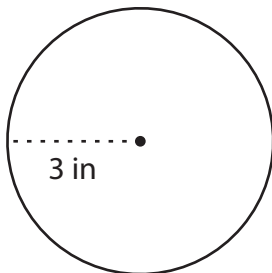
Radius = **8.5 yd**

Area = **226.87 yd²**

3) Diameter = 24 in

Radius = **12 in**

Area = **452.16 in²**

Find the area and radius/diameter of each circle (Use $\pi = \dfrac{22}{7}$ or 3.14). Round the answer to the two decimal places.
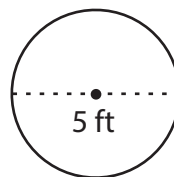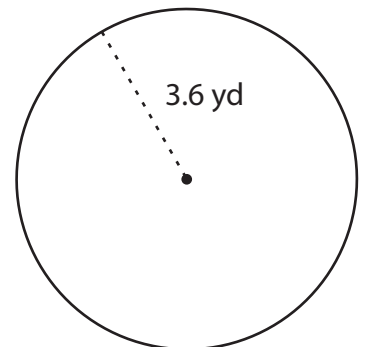
1)

3 in

Diameter = **6 in**

Area = **28.26 in²**

2)

5 ft

Radius = **2.5 ft**

Area = **19.63 ft²**

3)

3.6 yd

Diameter = **7.2 yd**

Area = **40.69 yd²**