



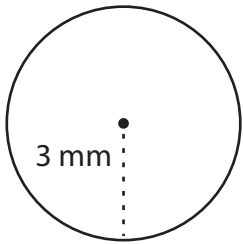
Area of Circles

Name _____

Score _____

AC:04

Example 1: Find the area of the circle.

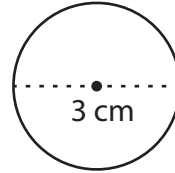


$$\text{Area of circle} = \pi r^2$$

$$\text{Radius (r)} = 3 \text{ mm}$$

$$\begin{aligned} \text{Area} &= \pi \times 3^2 \\ &= \pi \times 9 \\ &= \mathbf{9\pi \text{ mm}^2} \end{aligned}$$

Example 2: Find the area of the circle.



$$\text{Area of circle} = \pi r^2$$

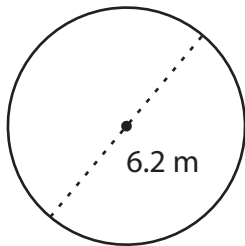
$$\text{Diameter (d)} = 2r ; r = \frac{d}{2}$$

$$\text{Diameter (d)} = 3 \text{ cm} ; r = 1.5 \text{ cm}$$

$$\begin{aligned} \text{Area} &= \pi \times 1.5^2 = \pi \times 2.25 \\ &= \mathbf{2.25\pi \text{ cm}^2} \end{aligned}$$

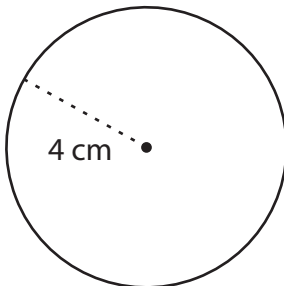
Find the area of each circle.

1)



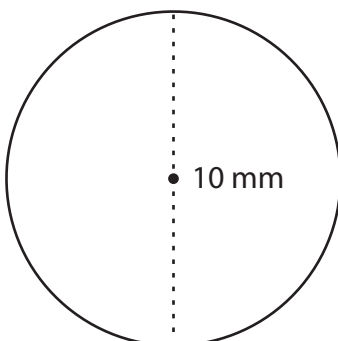
Area = m²

2)



Area = cm²

3)



Area = mm²

4) Diameter = 4 cm

Area = cm²

5) Radius = 7 mm

Area = mm²

6) Diameter = 11 cm

Area = cm²

7) Radius = 8 m

Area = m²

8) Diameter = 18 cm

Area = cm²



Area of Circles

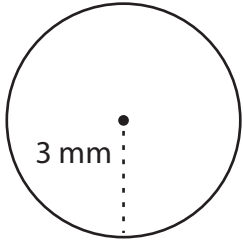
Name _____

Score _____

Answer key

AC:04

Example 1: Find the area of the circle.

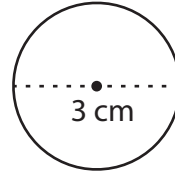


$$\text{Area of circle} = \pi r^2$$

$$\text{Radius (r)} = 3 \text{ mm}$$

$$\begin{aligned}\text{Area} &= \pi \times 3^2 \\ &= \pi \times 9 \\ &= \mathbf{9\pi \text{ mm}^2}\end{aligned}$$

Example 2: Find the area of the circle.



$$\text{Area of circle} = \pi r^2$$

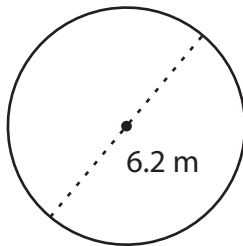
$$\text{Diameter (d)} = 2r ; r = \frac{d}{2}$$

$$\text{Diameter (d)} = 3 \text{ cm} ; r = 1.5 \text{ cm}$$

$$\begin{aligned}\text{Area} &= \pi \times 1.5^2 = \pi \times 2.25 \\ &= \mathbf{2.25\pi \text{ cm}^2}\end{aligned}$$

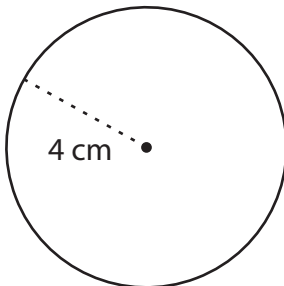
Find the area of each circle.

1)



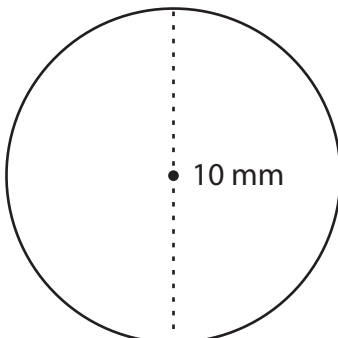
$$\text{Area} = \mathbf{9.61\pi} \text{ m}^2$$

2)



$$\text{Area} = \mathbf{16\pi} \text{ cm}^2$$

3)



$$\text{Area} = \mathbf{25\pi} \text{ mm}^2$$

4) Diameter = 4 cm

$$\text{Area} = \mathbf{4\pi} \text{ cm}^2$$

5) Radius = 7 mm

$$\text{Area} = \mathbf{49\pi} \text{ mm}^2$$

6) Diameter = 11 cm

$$\text{Area} = \mathbf{30.25\pi} \text{ cm}^2$$

7) Radius = 8 m

$$\text{Area} = \mathbf{64\pi} \text{ m}^2$$

8) Diameter = 18 cm

$$\text{Area} = \mathbf{81\pi} \text{ cm}^2$$