



Area of Circles

Name _____

Score _____

AC:12

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

Example 1

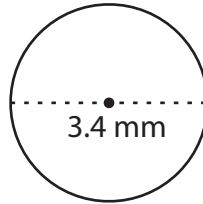


$$\text{Area of circle} = \pi r^2$$

$$\text{Radius (r)} = 1.2 \text{ mm}$$

$$\begin{aligned} \text{Area} &= 3.14 \times 1.2^2 \\ &= 3.14 \times 1.44 \\ &= \mathbf{4.52 \text{ mm}^2} \end{aligned}$$

Example 2



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

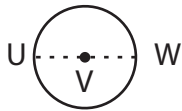
$$\text{Diameter (d)} = 2r ; r = \frac{d}{2}$$

$$\text{Diameter (d)} = 3.4 \text{ mm} ; r = 1.7 \text{ mm}$$

$$\begin{aligned} \text{Area} &= 3.14 \times 1.7^2 = 3.14 \times 2.89 \\ &= \mathbf{9.07 \text{ mm}^2} \end{aligned}$$

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)

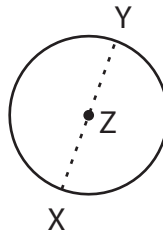


$$UW = 2 \text{ m}$$

$$UV = \underline{\hspace{2cm}}$$

$$\text{Area} = \underline{\hspace{2cm}}$$

2)

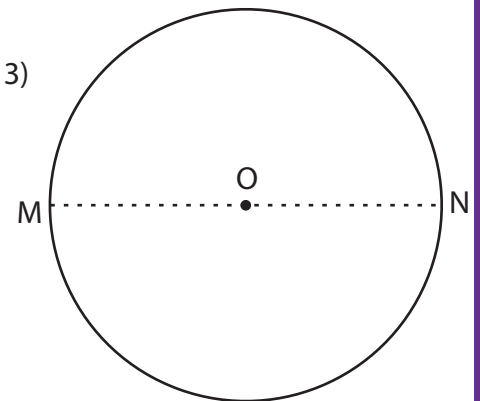


$$YZ = 1.5 \text{ cm}$$

$$XY = \underline{\hspace{2cm}}$$

$$\text{Area} = \underline{\hspace{2cm}}$$

3)

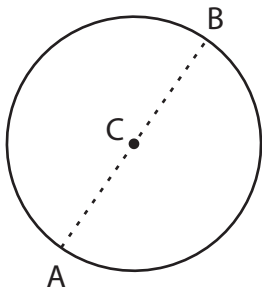


$$MN = 8.2 \text{ mm}$$

$$MO = \underline{\hspace{2cm}}$$

$$\text{Area} = \underline{\hspace{2cm}}$$

4)

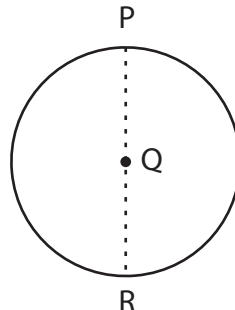


$$AB = 4.6 \text{ cm}$$

$$AC = \underline{\hspace{2cm}}$$

$$\text{Area} = \underline{\hspace{2cm}}$$

5)

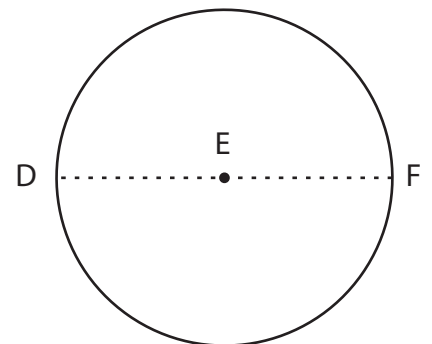


$$PQ = 2 \text{ m}$$

$$PR = \underline{\hspace{2cm}}$$

$$\text{Area} = \underline{\hspace{2cm}}$$

6)



$$DF = 5.8 \text{ mm}$$

$$DE = \underline{\hspace{2cm}}$$

$$\text{Area} = \underline{\hspace{2cm}}$$



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Answer key

AC:12

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

Example 1

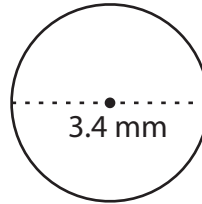


$$\text{Area of circle} = \pi r^2$$

$$\text{Radius (r)} = 1.2 \text{ mm}$$

$$\begin{aligned} \text{Area} &= 3.14 \times 1.2^2 \\ &= 3.14 \times 1.44 \\ &= \mathbf{4.52 \text{ mm}^2} \end{aligned}$$

Example 2



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

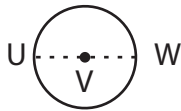
$$\text{Diameter (d)} = 2r ; r = \frac{d}{2}$$

$$\text{Diameter (d)} = 3.4 \text{ mm} ; r = 1.7 \text{ mm}$$

$$\begin{aligned} \text{Area} &= 3.14 \times 1.7^2 = 3.14 \times 2.89 \\ &= \mathbf{9.07 \text{ mm}^2} \end{aligned}$$

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)

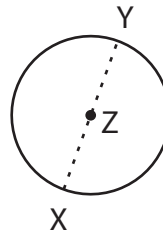


$$UW = 2 \text{ m}$$

$$UV = \mathbf{1 \text{ m}}$$

$$\text{Area} = \mathbf{3.14 \text{ m}^2}$$

2)

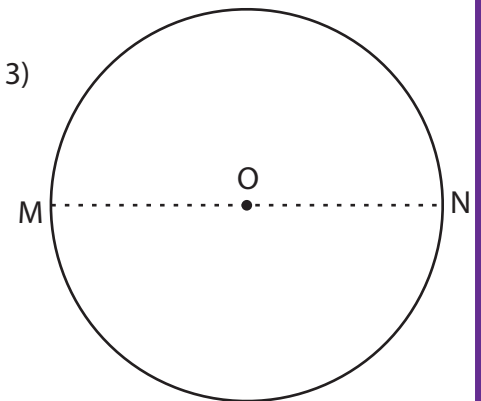


$$YZ = 1.5 \text{ cm}$$

$$XY = \mathbf{3 \text{ cm}}$$

$$\text{Area} = \mathbf{7.07 \text{ cm}^2}$$

3)

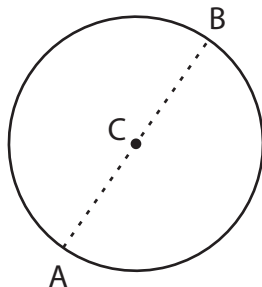


$$MN = 8.2 \text{ mm}$$

$$MO = \mathbf{4.1 \text{ mm}}$$

$$\text{Area} = \mathbf{52.78 \text{ mm}^2}$$

4)

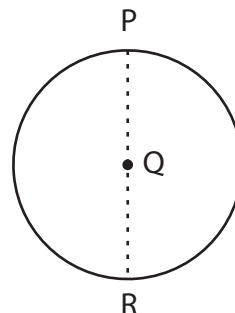


$$AB = 4.6 \text{ cm}$$

$$AC = \mathbf{2.3 \text{ cm}}$$

$$\text{Area} = \mathbf{16.61 \text{ cm}^2}$$

5)

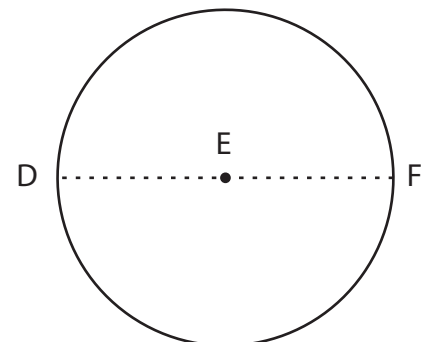


$$PQ = 2 \text{ m}$$

$$PR = \mathbf{4 \text{ m}}$$

$$\text{Area} = \mathbf{12.56 \text{ m}^2}$$

6)



$$DF = 5.8 \text{ mm}$$

$$DE = \mathbf{2.9 \text{ mm}}$$

$$\text{Area} = \mathbf{26.41 \text{ mm}^2}$$