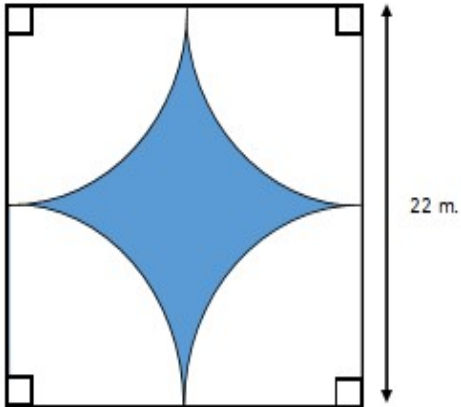
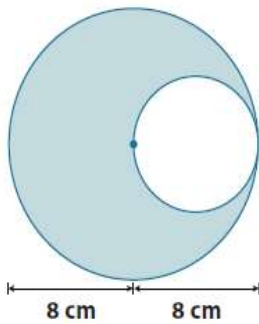


## Composite Area Problems Worksheets

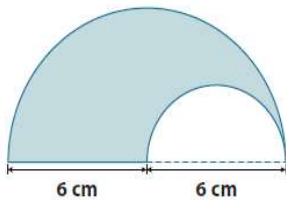
1. The unshaded regions are quarter circles. Approximate the area of the shaded region. Use  $\pi \approx 3.14$ .



2. Find the area of the shaded region. Use 3.14 for  $\pi$ .

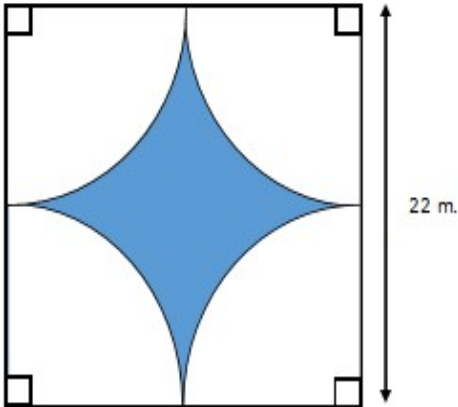


3. The figure shows two semicircles. Find the area of the shaded region. Use 3.14 for  $\pi$ .



## Composite Area Problems Worksheets

1. The unshaded regions are quarter circles. Approximate the area of the shaded region.  
Use  $\pi \approx 3.14$ .



Area of the square – area of the 4 quarter circles =  
area of the shaded region

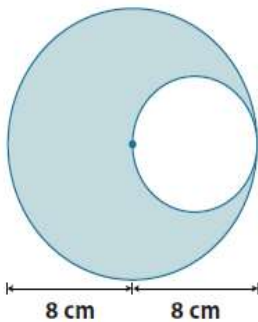
$$(22 \text{ m} \cdot 22 \text{ m}) - ((11 \text{ m})^2 \cdot 3.14)$$

$$484 \text{ m}^2 - 379.94 \text{ m}^2$$

$$104.06 \text{ m}^2$$

*The area of the shaded region is  
approximately 104.06 m<sup>2</sup>.*

2. Find the area of the shaded region. Use **3.14** for  $\pi$ .



Area of large circle – area of small circle

$$(\pi \times (8 \text{ cm})^2) - (\pi \times (4 \text{ cm})^2)$$

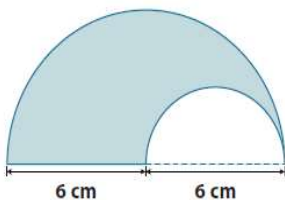
$$(3.14)(64 \text{ cm}^2) - (3.14)(16 \text{ cm}^2)$$

$$200.96 \text{ cm}^2 - 50.24 \text{ cm}^2$$

$$150.72 \text{ cm}^2$$

*The area of the region is approximately 150.72 cm<sup>2</sup>.*

3. The figure shows two semicircles. Find the area of the shaded region. Use 3.14 for  $\pi$ .



Area of large semicircle region – area of small semicircle region

$$\left(\frac{1}{2}\right)(\pi \times (6 \text{ cm})^2) - \left(\frac{1}{2}\right)(\pi \times (3 \text{ cm})^2)$$

$$\left(\frac{1}{2}\right)(3.14)(36 \text{ cm}^2) - \left(\frac{1}{2}\right)(3.14)(9 \text{ cm}^2)$$

$$56.52 \text{ cm}^2 - 14.13 \text{ cm}^2$$

$$42.39 \text{ cm}^2$$

*The area is approximately 42.39 cm<sup>2</sup>.*

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