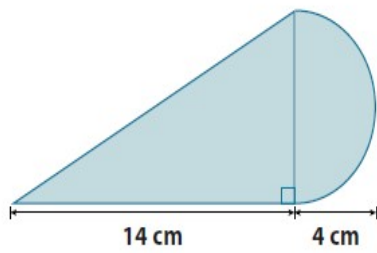
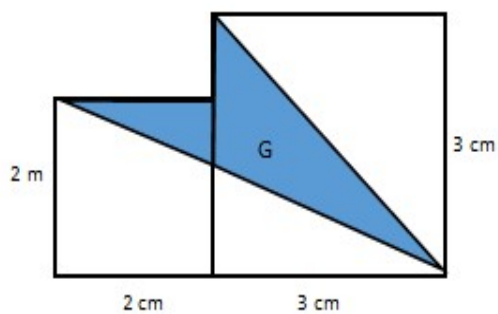


Composite Area Problems Worksheets

1. Find the area of the shaded region. Use 3.14 for π .

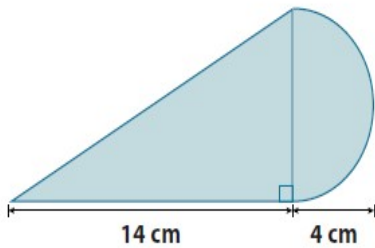


2. Find the area of the shaded region. The figure is not drawn to scale.



Composite Area Problems Worksheets

1. Find the area of the shaded region. Use 3.14 for π .

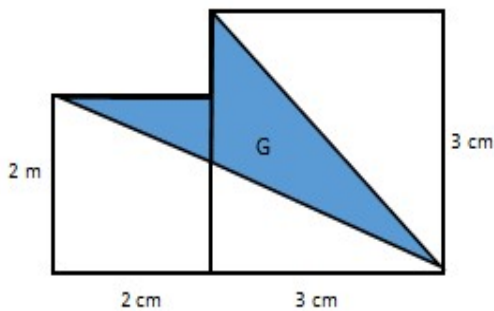


Area of the triangle + area of the semicircle = area of the shaded region

$$\begin{aligned} & \left(\frac{1}{2} b \times h\right) + \left(\frac{1}{2}\right)(\pi r^2) \\ & \left(\frac{1}{2} \cdot 14 \text{ cm} \cdot 8 \text{ cm}\right) + \left(\frac{1}{2}\right)(3.14 \cdot (4 \text{ cm})^2) \\ & 56 \text{ cm}^2 + 25.12 \text{ cm}^2 \\ & 81.12 \text{ cm}^2 \end{aligned}$$

The area is approximately 81.12 cm².

2. Find the area of the shaded region. The figure is not drawn to scale.



Area of squares – (area of the bottom right triangle + area of the top right triangle)

$$\begin{aligned} & ((2 \text{ cm} \times 2 \text{ cm}) + (3 \text{ cm} \times 3 \text{ cm})) \\ & - \left(\left(\frac{1}{2} \times 5 \text{ cm} \times 2 \text{ cm} \right) + \left(\frac{1}{2} \times 3 \text{ cm} \times 3 \text{ cm} \right) \right) \\ & 13 \text{ cm}^2 - 9.5 \text{ cm}^2 \\ & 3.5 \text{ cm}^2 \end{aligned}$$

The area is 3.5 cm².

There are multiple solution paths for this problem. Explore them with students.