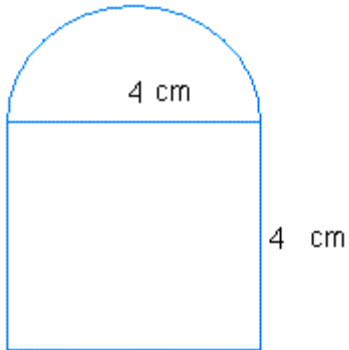


Area of Composite Shapes Advanced Guided Lesson Explanation

Answer 1: The figure above has two regular shapes: a square and a semi-circle. Find the area for each of those two shapes and add them to find the total area.



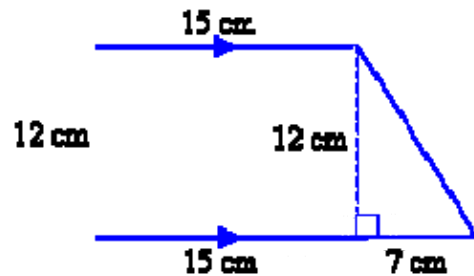
$$\text{Area of square} = 4 \times 4 = 16 \text{ square cm}$$

$$\text{Area of semi-circle} = \frac{1}{2} \times 3.14 \times 2 \times 2 = 6.28 \text{ square cm}$$

$$\text{Total Area} = \text{Area of square} + \text{Area of semi-circle}$$

$$\text{Total Area} = 16 \text{ square cm} + 6.28 \text{ square cm} = 22.28 \text{ square cm}$$

Answer 2: The complex shape can be split into a rectangle A (15x12) and a triangle B with a base of 7 and a height of 12 cm. Again, find the area of each regular shape and add them.



$$\text{Area of rectangle} = 180 \text{ square cm}$$

$$\text{Area of triangle} = \frac{1}{2} \times \text{base} \times \text{height} = \frac{1}{2} \times 7 \times 12 = 42 \text{ square cm}$$

$$\text{Total area of the figure} = \text{Area of rectangle} + \text{Area of triangle}$$

$$\text{Total area of the figure} = 180 \text{ square cm} + 42 \text{ square cm}$$

$$\text{Total area of the figure} = 222 \text{ square cm}$$

