

# **Chapter 10**

# **Geometry and Measurement**

## **10.4 Area of a Circle**

**Pages- 531--540**



16) semicircle \_

(+)

triangle

$$\begin{aligned}
 A &= \frac{1}{2}\pi r^2 \\
 A &= \frac{1}{2} \cdot 3.14 \cdot 6.5^2 \\
 A &= \frac{1}{2} \cdot 3.14 \cdot 42.25 \\
 A &= 1.57 \cdot 42.25 \\
 A &= 66.3325 \text{ cm}^2
 \end{aligned}$$

$$\begin{aligned}
 A &= \frac{1}{2}bh \\
 A &= \frac{1}{2} \cdot 12 \cdot 5 \\
 A &= 6 \cdot 5 \\
 A &= 30 \text{ cm}^2
 \end{aligned}$$

66.3325

30

96.3325

A = 963 cm<sup>2</sup>

18) circle

(-)

triangle

$$\begin{aligned}
 A &= \pi r^2 \\
 A &= \frac{22}{7} \cdot 7^2 \\
 A &= \frac{22}{7} \cdot 49 \\
 A &= 154 \text{ m}^2
 \end{aligned}$$

$$\begin{aligned}
 A &= \frac{1}{2}bh \\
 A &= \frac{1}{2} \cdot 14 \cdot 7 \\
 A &= 7 \cdot 7 \\
 A &= 49 \text{ m}^2
 \end{aligned}$$

154

49

105

A = 105 m<sup>2</sup>