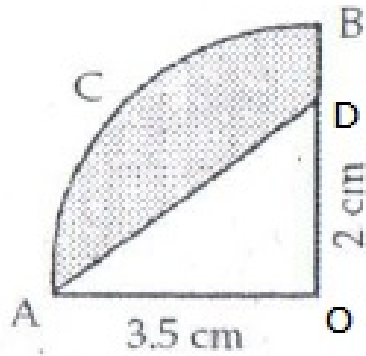




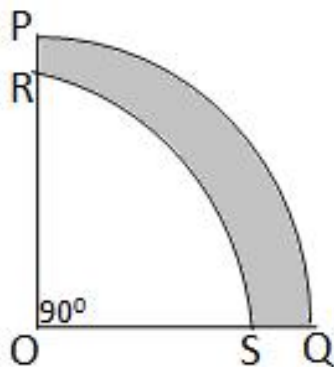
Question 36:



Shaded area = (area of quadrant) - (area of DAOD)

$$\begin{aligned}
 &= \left[\frac{1}{4} \pi r^2 - \frac{1}{2} \times h \times b \right] \\
 &= \left[\frac{1}{4} \times \frac{22}{7} \times 3.5 \times 3.5 - \frac{1}{2} \times 2 \times 3.5 \right] \text{cm}^2 \\
 &= (9.625 - 3.5) \text{cm}^2 = 6.125 \text{cm}^2
 \end{aligned}$$

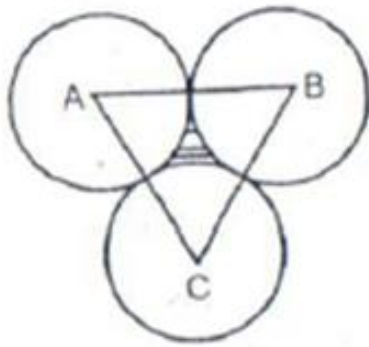
Question 37:



Area of flower bed = (area of quadrant OPQ) - (area of the quadrant ORS)

$$\begin{aligned}
 &= \left[\frac{1}{4} \pi r_1^2 - \frac{1}{4} \pi r_2^2 \right] \\
 &= \left[\frac{1}{4} \times \frac{22}{7} \times 21 \times 21 - \frac{1}{4} \times \frac{22}{7} \times 14 \times 14 \right] \text{m}^2 \\
 &= [346.5 - 154] \text{m}^2 = 192.5 \text{m}^2
 \end{aligned}$$

Question 38:

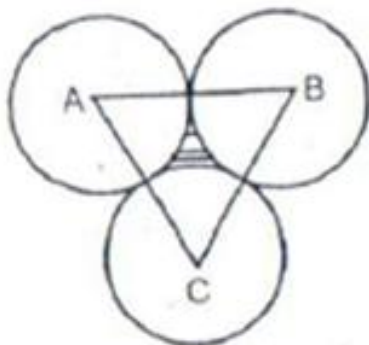


Let A, B, C be the centres of these circles. Join AB, BC, CA
 Required area = (area of $\triangle ABC$ with each side $a = 12$ cm) - 3(area of sector with $r = 6$, $\theta = 60^\circ$)

$$\begin{aligned}
 &= \left[\frac{\sqrt{3}}{4} \times (12)^2 - 3 \times \left(3.14 \times (6)^2 \times \frac{60}{360} \right) \right] \\
 &= \left[\frac{\sqrt{3}}{4} \times 12 \times 12 - 3 \times 3.14 \times 6 \right] \text{ cm} \\
 &= (36 \times 1.73 - 56.52) \text{ cm}^2 \\
 &= (62.28 - 56.52) \text{ cm}^2 \\
 &= 5.76 \text{ cm}^2
 \end{aligned}$$

The area enclosed = 5.76 cm^2

Question 39:



Let A, B, C be the centers of these circles. Join AB, BC, CA
 Required area = (area of $\triangle ABC$ with each side 2) - 3[area of sector with $r = a$ cm, $\theta = 60^\circ$]

$$= \left[\frac{\sqrt{3}}{4} \times (2a)^2 - \frac{3\pi a^2 \times 60}{360} \right]$$

$$= (1.73 a^2 - 1.57 a^2)$$

$$= 0.16 a^2$$

$$= \frac{16}{100} a^2$$

$$= \left(\frac{4}{25} a^2 \right) \text{sq unit}$$

***** END *****