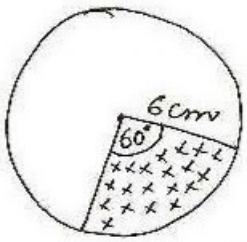
ex 12.2

(1)



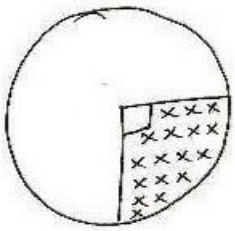
area of Sector $= \pi r^2 \frac{\theta}{360}$

$= \frac{22}{7} \times 6 \times 6 \times \frac{60^1}{360_6}$

$= \frac{132}{7}$

$= 18.85\ cm^2$

(2)



circumference of $\odot = 22cm$

$2\pi r = 22$

$2 \times \frac{22}{7} r = 22^1$

$\Rightarrow r = \frac{7}{2} cm$

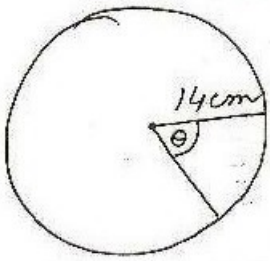
area of quadrant $= \frac{\pi r^2 \theta}{360}$

$= \frac{22^{11}}{7_1} \times \frac{7^1}{2_1} \times \frac{1}{2} \times \frac{90^1}{360_4}$

$= \frac{77}{8}$

$= 9.625\ cm^2$

(3)



angle swept in 5 min.

$= 5 \times 6$

$= 30°$

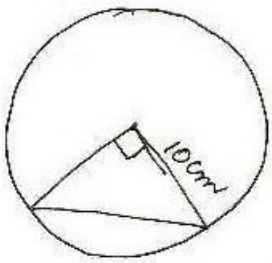
area of Sector $= \pi r^2 \frac{\theta}{360}$

$= \frac{22}{7} \times 14 \times 14 \times \frac{30^1}{360_{12_6}}$

$= \frac{154}{3}$

$= 51.33 cm^2$

(4)



area of minor Segment

$= r^2 \left(\frac{\pi\theta}{360} - \frac{\sin\theta}{2} \right)$

$= 10 \times 10 \left(\frac{3.14 \times 90^1}{360_4} - \frac{\sin 90}{2} \right)$ (1.57)

$= 100^{50} \left(1.57 - \frac{1}{2_1} \right)$

$= 50 \times .57$

$= 28.5\ cm^2$

area of major Sector

$= \frac{\pi r^2 \theta}{360}$

$= 3.14 \times 10 \times 10 \times \frac{270^3}{360_4}$ (1.57)

$= \frac{471}{2}$

$= 235.5\ cm^2$