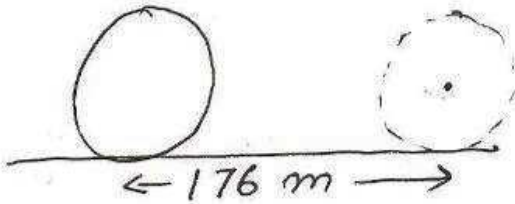


(18)



$$\text{area of wheel} = 1.54 \text{ m}^2$$

$$\pi r^2 = 1.54$$

$$r^2 = \frac{1.54 \times 7}{22}$$

$$\Rightarrow r = \sqrt{0.7 \times 7}$$

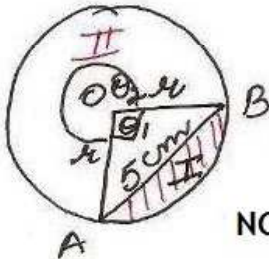
$$= 0.7 \text{ cm}$$

$$\text{no. of revolutions} = \frac{\text{distance travelled}}{\text{circumference of wheel}}$$

$$= \frac{176}{2 \times \frac{22}{7} \times 0.7}$$

$$= 40$$

(19)



NCERT Exemplar Solutions by Dev Anoop (Bathinda)

$$\text{In rt } \triangle AOB$$

$$r^2 + r^2 = AB^2$$

$$2r^2 = 5 \times 5$$

$$r = \frac{\sqrt{5 \times 5}}{\sqrt{2}}$$

$$= \frac{5}{\sqrt{2}} \text{ cm}$$