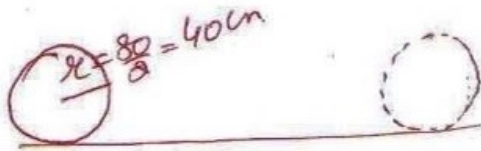


ex 12.51

(4)



distance trav. in 1 hr or 60 min = 66 km

dis. trav. in 10 min =  $\frac{66}{60} \times 10$

$$= 11 \text{ km}$$

$$= 1100000 \text{ cm}$$

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

$$= \frac{1100000}{2\pi r}$$

$$= \frac{1100000}{2 \times 22 \times 40}$$

$$= 625 \times 7$$

$$= 4375$$

(5)

Perimeter (circumference) of  $\odot$  = area of  $\odot$   
[numerically]

$$2\pi r = \pi r^2$$

$$\Rightarrow r^2 - 2r = 0$$

$$\Rightarrow r(r-2) = 0$$

$$r = 0, r - 2 = 0$$

rejected  $\Rightarrow r = 2$

$\therefore$  radius = 2 units (A)