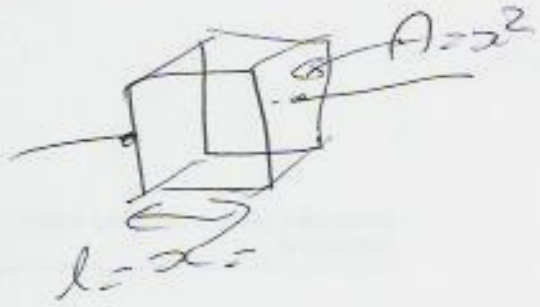
1) $R = \frac{\rho l}{A} = \frac{\rho x}{x^2} = \frac{\rho}{x}$



C

2) D

3) $I = \frac{V}{R} = \frac{9}{100} = 0.09$

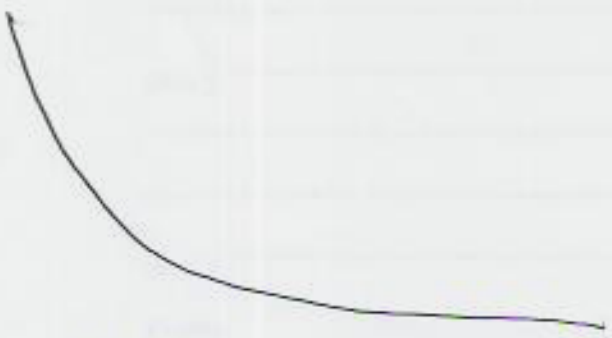
I = no. of electrons per sec × e

no. electrons per sec = $\frac{0.09}{e \cdot 6 \times 10^{-19}}$

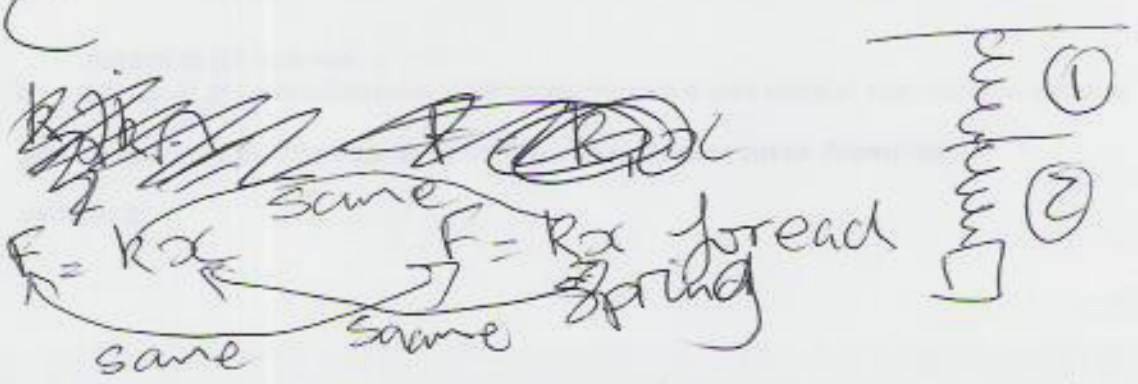
$= 5 \cdot 6 \times 10^{17}$

A

4)



v increases because GPE changed to KE but a decreases because incline decreases

C

5)