

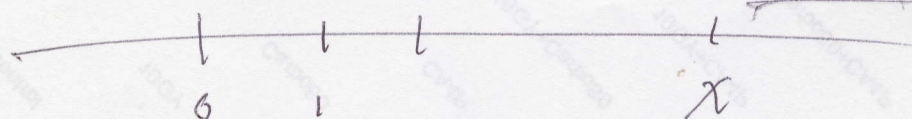
$$P(\cancel{x_0} T < x_0 + 1 \mid T \geq x_0)$$

$$= \frac{S(x_0) - S(x_0 + 1)}{S(x_0)} = 1 - \frac{S(x_0 + 1)}{S(x_0)}$$

$$\underline{S(x)} = P(\underline{T \geq x}) = \prod_{i=0}^{x-1} \left[1 - P(i \leq T < i+1 \mid T \geq i) \right]$$

$$\prod_{i=0}^{x-1} P(T \geq i+1 \mid T \geq i)$$

$$= \prod_{i=0}^{x-1} \left[1 - P(T < i+1 \mid T \geq i) \right]$$



$$P(T \geq 5) = \underbrace{(1 - 0.007344)}_1 \underbrace{(1 - 0.000460)}_2 \underbrace{(\quad)}_3$$