① $\lambda = 1.8$

Convert 15 to days = $\frac{15}{1440}$ = 0,0104 day , ⇒ $\boxed{1,96 \text{ days}}$

from exponintial low :-

pdf = $\lambda e^{-\lambda x}$ = 1,766

cdf = $1 - e^{-\lambda x}$ = 0,0185 ※

② Chance with no Calls = chance with Calls

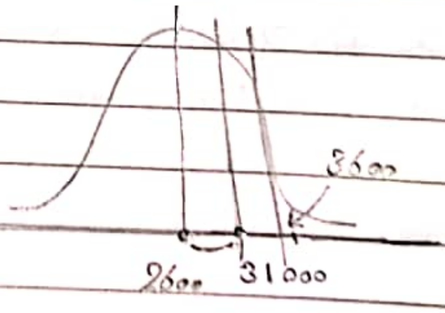
يعني بطريقة عن احتمالية انه محدش اتصل بيه مكالمة قبل كده انه هيجي له

= 0,0185 ※ مكالمة ولا لأ هي هي لو عن احتمال الـ 15 دقيقة

$\mu = 26000$, std = 5000

$\mu + \text{std} = 31000$

$\mu + 2\text{sd} = 36000$



from μ to Q_1 + μ to Q_2

= −68/2 + 95/2 = 13.5 % ※

95 -

or $Z = \frac{\mu - x}{\sigma}$ ∴ $x_1 = 1$ & $x_2 = 2$

∴ x between Q_1 and Q_2 = 0.9772 − 0,8413 = 13,5 % ※

probability homework lec5   الموضوع:

$0.3 \rightarrow A$

$0.7 \rightarrow B$

$P(D|A) = 0.05$ $\therefore P(D'|A) = 0.95$

$P(D|B) = 0.04$ $\therefore P(D'|B) = 0.96$

$\therefore P(A \cap D) = P(D|A) \cdot P(A) = 0.015$ ※

$\therefore P(B \cap D') = P(D'/B) \cdot P(B) = 0.96 \cdot 0.7 = 0.665$ ※

$7 \rightarrow$ Red $3 \rightarrow$ white | $6 \rightarrow$ Red $4 \rightarrow$ white

$P(\text{red}|\text{firest}) = 7/10$ $P(\text{first}) = 1/6$

$P(\text{second}) = 5/6$

$P(\text{red}|\text{second}) = 6/10$

$P(\text{dice} < 5) = 6/36$ $P(\text{dice} > 5) = 30/36$

$= 1/6$ $5/6$

$P(\text{red}) = P(R \cap F) + P(R \cap S) =$

$= \frac{7}{10} * 1/6 + \frac{6}{10} * 5/6 = \frac{37}{60}$ ※

3) $P(W_1) = 10\%$ $\therefore P(L_1) = \underline{\underline{90\%}}$

$P(W_2 | W_1) = 15\%$ $P(L_2 | W_1) = 85\%$

$P(W_2 | L_1) = 25\%$ $P(L_2 | L_1) = 75\%$

$\therefore P(W_1 / L_2) = \dfrac{P(L_2|W_1) \cdot P(W_1)}{P(L_2)} \leftarrow$ مش معايا

$W \to$ win

$L \to$ lose

$W' = L$

$\therefore P(L_2) = P(L_2 \cap W_1) \cup P(L_2 \cap L_1)$

نطرح واحد من الـ W أجيب الـ L

$P(L_2|W_1) \cdot P(W_1) + P(L_2|L_1) \cdot P(L_1)$

$= 0.85 * 0.1 + 0.75 * 0.9$

$= 0.76\ \%$

$\therefore P(W_1 / L_2) = \dfrac{0.85 * 0.1}{0.76} = 0.1118 \simeq 11.2\%$