George Paul 2021 121 006 Perobability and Statistics Assignment 4 - roblem a) $P(x>5) = \int_{5}^{\infty} \lambda e^{-\lambda n} dx$ $= \lambda \begin{bmatrix} e^{-\lambda x} \\ -\lambda \end{bmatrix} \delta \delta \delta \delta$ $= -1 \begin{bmatrix} 1 \\ e^{\sigma} \\ \hline e^{\lambda x} \end{bmatrix}$ $= \frac{1}{e^{5\lambda}} \begin{bmatrix} e^{5\lambda} \\ e^{5\lambda} \end{bmatrix}$ $= \frac{1}{e^{5\lambda}} \begin{bmatrix} e^{5\lambda} \\ e^{5\lambda} \end{bmatrix}$ -> Problem 3 pmf of X is $F_{x}(x) = \begin{cases} 6 & \text{supprise} \\ \frac{1}{5} & \text{so} \\ \frac{1}{5} & \text{so} \\ \frac{3}{5} & \text{so} \\ \frac{3}{5} & \text{so} \end{cases}$ Cdf Fx(x) = 1 7e-xx dx = 1-e-xx