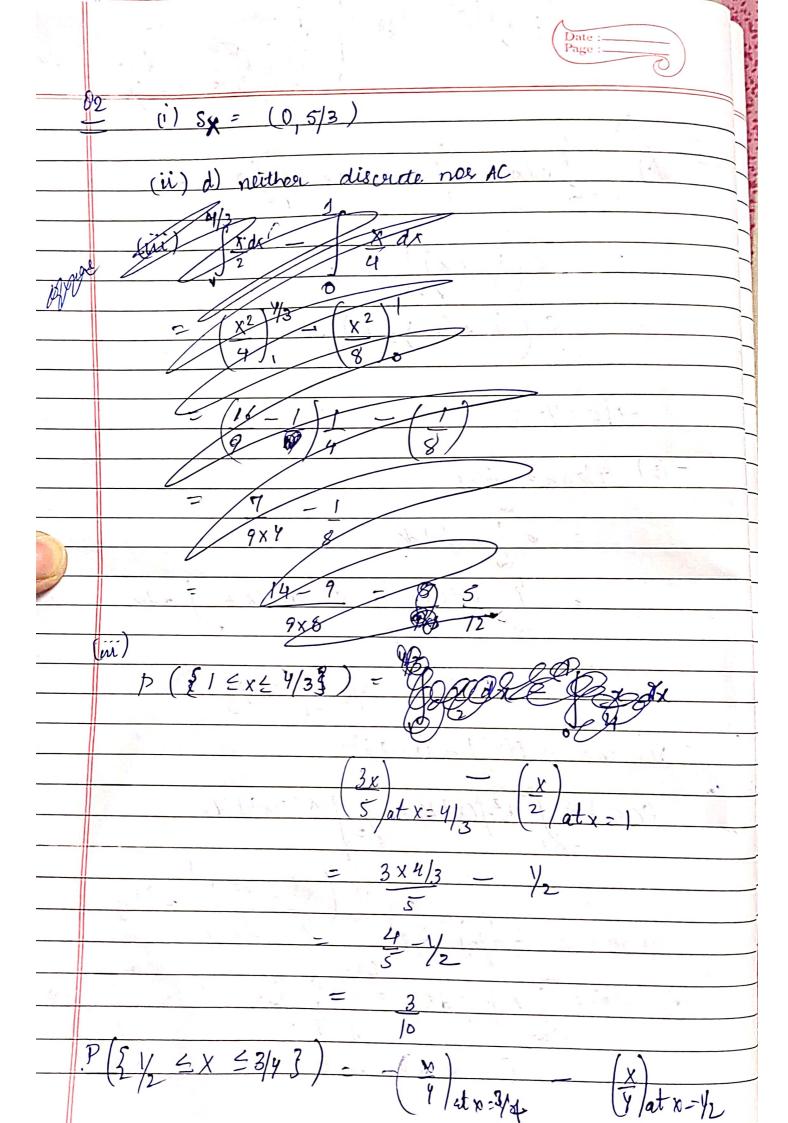
Judo & Cextude + fodx =1 $C\left(\frac{N^{L}+x}{2}\right)$ $\frac{C}{\left(\frac{1}{2}+1-\frac{1}{2}+1\right)}$ + C= Y2 Meanz E(x) = of on falds = 1 Odk + 1 x(x+1) 1x+ 101x = /2 (x3/3 + x2/2) = /3 Mariano - f(x2/- (f(x))2 E(x2) = 1 x2-f(x/dx = 1/2/x3+x2/dx $= \frac{1}{2} \left(\frac{x'' + x^3}{4} \right) = \frac{1}{2} \left(\frac{x'' + x'' + x$ D. $f(x) = \int xf(x) dx = \int xf(x$ E(x) doesn't lendt





$$E(x^2) = \sum_{x=0}^{\infty} x^2 \int_{x} (x) = \sum_{x=0}^{\infty} x^2 e^{-x} d^x$$

$$= \sum_{x=0}^{\infty} \left(\chi(x-1) + x \right) \underbrace{e^{-\lambda} \lambda^{2}}_{x}$$

$$= \underbrace{\sum_{x=0}^{\infty} \lambda^2 e^{-\lambda} \lambda^{x-2}}_{(x-2)!} + \lambda$$

$$F(x^3) = \sum_{x=0}^{\infty} \frac{\sum_{x=0}^{\infty} x^3 e^{-\lambda} \lambda^x}{x!}$$

$$= \underbrace{\sum_{x=0}^{2} e^{-\lambda} \lambda^{3} \lambda^{x-3}}_{(x-3)} + \underbrace{3e^{-\lambda} \lambda^{2} \lambda^{x-2}}_{(x-2)}$$

$$Var(X) = E(X^2) - (E(X))^2 = d^2 + d - d^2 = d$$

