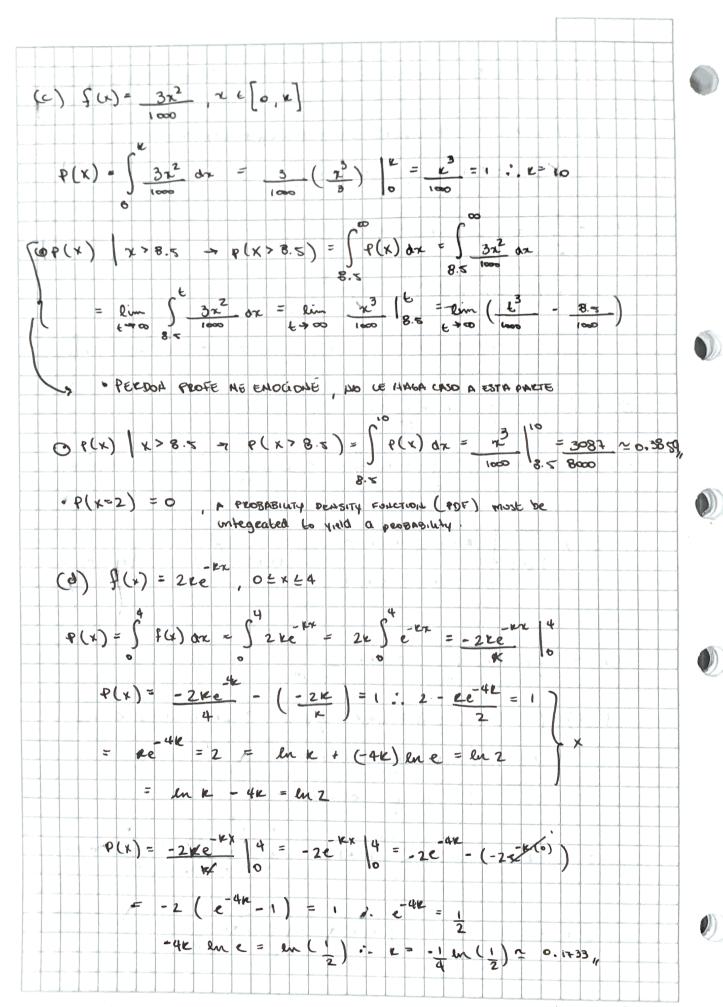
QUANTITATIVE NETHODS & SINULATION AUGUST 16,2021 · CALWLATE & SUCH THAT (LA) IS A PROBABILITY DOLLETY FONCTION (a) $f(x) = hx^2 + 1 \cdot x \in [0,3]$ $P(x) = \int kx^2 + 1 dx = kx^3 + x |^3 = 1$: (K(3) + 3) - (x(0) + 0) = 1 ○ P(X41) = ∫ 0.12 + 1 dx = 1 = 0.06 $OP(8.2 \le X \le 2.6) = \int_{0.17}^{26} P(X) dx = 0.17^3 - 1 = 416 = 0.6656$ (b) $\begin{cases} x + x & -1 \le x \le 0 \\ \vdots & e(x) = \int_{-1}^{0} e(x) dx + \int_{0}^{\infty} e(x) dx \end{cases}$ $P(\chi) = \frac{1}{2} + \frac{1}{2} = 1$ P(X)=(0-(-k+1))+ (x-1)=1 -> 22-1=1: E=1 $P(X) = \begin{cases} 41 + \frac{1^2}{2}, -1 < x < 0 \\ 11 - \frac{1}{2}, 0 \le x \le 1 \end{cases}$ $\bigcirc P(0.2 + 2 + 0.6) = \int P(x) dx = \frac{x^2 + \frac{2}{3}}{4} = \frac{3}{6} = \frac{6}{25} = 0.24$ () P((-0.5 4 x 40.2) =) P(x) dx + (P(x) dx = 11) = 0.555

1



Norma

