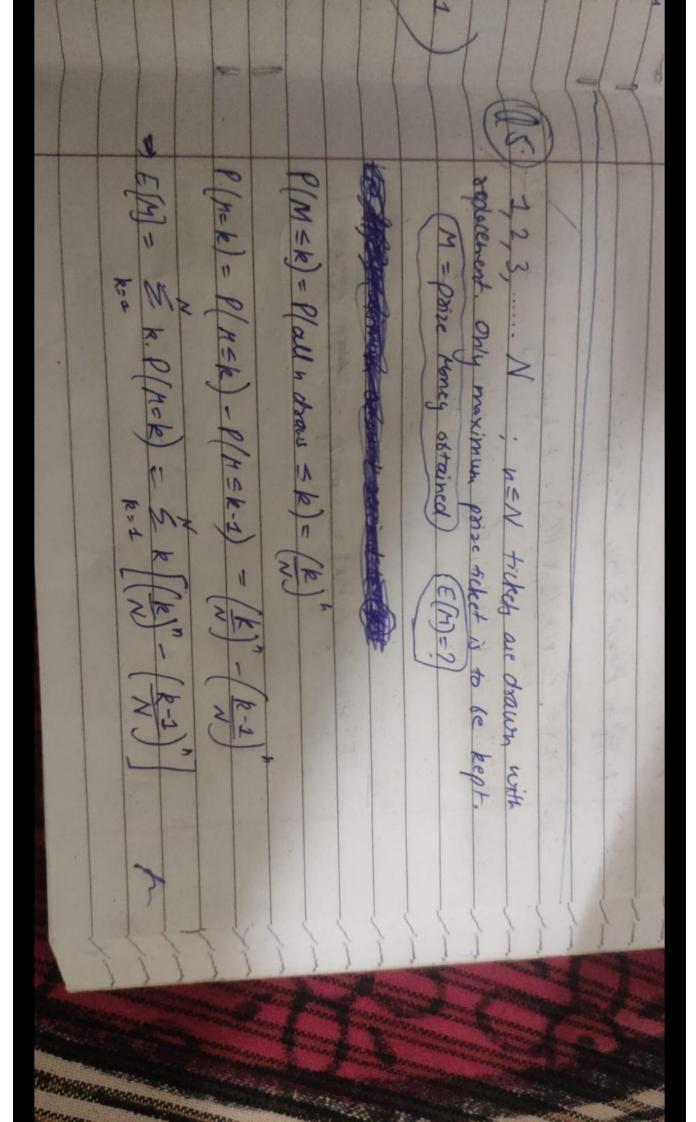
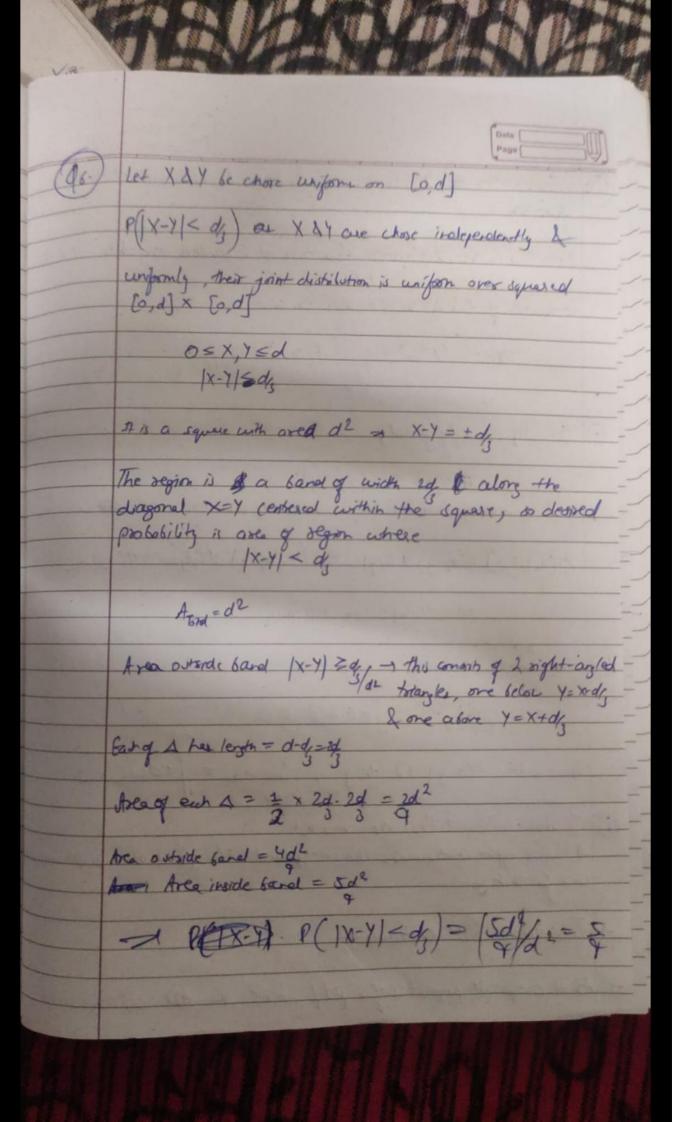


not trived probability is die to d (Day) Convolation of 2 distribution function is also a distribution Junction Let F&G be distribution function of 2 vardom variables XLY Convulation of F& L. can be written as + H(4) - (F+6) (x = | F(x-4) d G(4) 1 let my car for freely F(2=y) = F(2=y) Fis nothing non-decessing, integrating the side wit to a H(n) = J F(n,-y) d G(g) = f(n,-y) d G(y) = H(n) > H(2) A hon-dealeasing 2000, for any 4, 4-4-0 - F(x-4)-00 (ii) au lim Hon = Joda(y) = 0 a 230, f(2-y) - 2 + y, lin no = \ \ 1 day = (To show: Hen -> 1/20) as 2-> 2+ O: Fis right continuous, the integrand F(x-y) is also hight-whinds inx freathy. - Thuy flow is right continuious. - As it obegand properties of a pay, hence an dear distribution





diagonal XII no desired probability is I d' into Page let Ci be gift in present i, i= 1,2,3 Let the be host opens prosent 2 & shows it is empty I chose present 1 , initially I need E[win/Hz, I switch to present 3] = 100. P(G, M2) + 0. P(G, H2) = 100. P(G, H2) - M gip are equally likely to be chosen P(G2) = P(G2) = Ph) = 42 CoveRs If gift in Beyont 1 > P(H2/Gz)=1/2 Casto If gift in Beach 2 = P(HzKie)=0 Contato of get in Present 3 = P(1/2/43)=1 P(G3/H2) = P(H3/G3) P(G3) = 1.4/3 = 2/2 E[win/ ty, Switch] = 100.24 = 100 611.67

Ihrs

