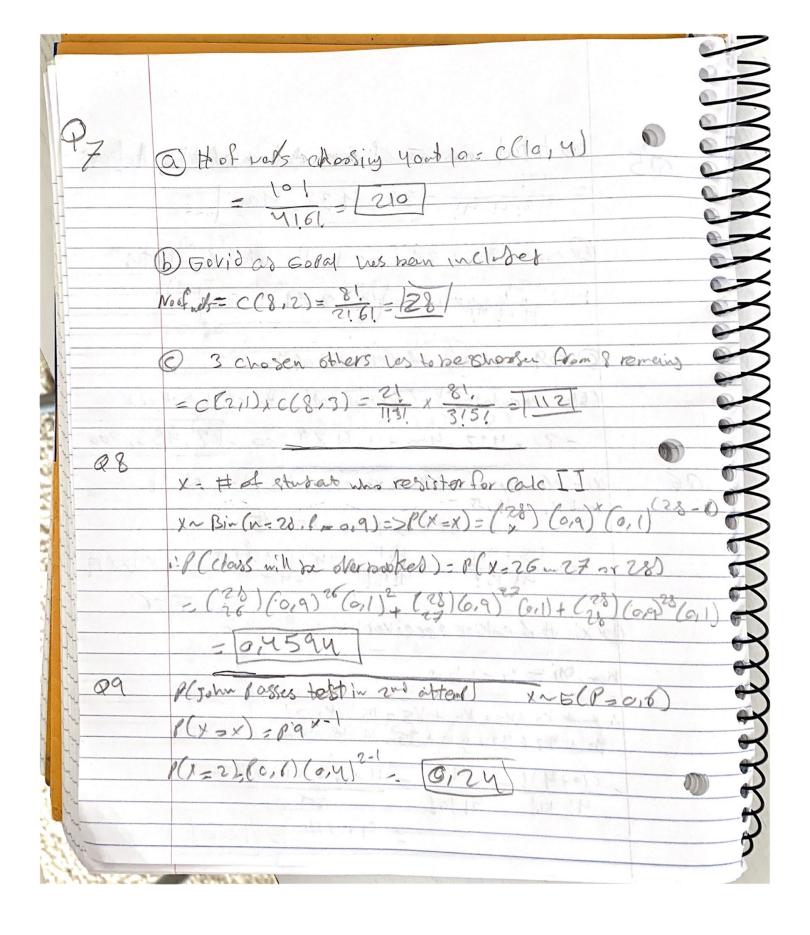


Q2 P(B) = badmiton = 0,32 P(T) = tennis = 0,60 P(BandT) = Cilo P(BUT) = P(B) + P(T) - P(BODT) = 0,32+0,60-0,10 =01/2 P(BUTC) = 1-0182 = 01/81 Q3 =(25+3-1)6(3-1)=(27)((2)=35P(K) - Knows ams = 0,75 P(G) = GOIESS CUNS = 0,25 P(C/5)= Correct when Guess = 0,2 P(NC/E)=Not correct when Geness = 0,8 : The Rob of Not correct = P(NC) = P(B) x P(NC/6) . the Prob that Subert guess given ans correctly= P(G/Ne) = (P(Ne/6) * P(G)) / P(Ne) =

a) total marmoer of Berm atation of the Hetters = 212121 41 - 32, 432, 400 Bansidering 26's as I withe total permitator = 121, 121 = 9, 979, 200 O Required No of Permutated = (total lemmutates") - (lemmutates in the is to sether) -32+432,400-9,979,200=22,453,200 XI = Namber of pookies received by 1-th child: X1+27+ X2+ Xn+ X5 = 15 115+4)! 19! - 216x17X18X19 - 12X17X19 Dxi # of cookier receiver by 1- the child 11 y 1 x X 2 + X 2 + X 4 + X 5 = 15 , X 1 > 1 - 91 + 92 + 93 + 9 4 + 95 , 16 , 91 > 0 (10+4); - 14; - 11 x 10 x 13 x 14 7



Treelectebbbbbbbb 0 + 8 (Reter pass in 3 rd ottempt) P(x=3)=(0,6)(0,4)3-1=0,096 010 Using regulite Binomial M+K = No : of friend = 8 K = 7 P(1=5)=(x+K-1) PK(0,Z)5 = (2) (0,3)2(0,7) = 0,3176 __(X = 2 hurriscenes 2- No. of hurricen in a given year give. Ave No. Of hurricen per year = 2 per toon 18 An Possesson (1), then P(X=1) = et ht p x = 10 So 10 (x=E) = e (2) - 4 e2 2 (0,180447 a) [P(x=x)=1 => P(x=1)+P(1-2) +P(x=3)-02 DO13+ Q+ 0,5 = 1 1 Px (2x) = P (x < x 1 , cine exto) = P(xcc) -, o Pr(x)s Fx(1) = BKC1 -BQ-1=0,3 63,16x.42 Acc 3(xc) - 1/4-1/4 (x2) = 0,5 0,5,24x63 2x(2)=(x1)+P(x=2)+P(x=3) (413+0,2+0,5=

