CSE 230 BONUS ASSIGNMENT

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SECTION: 3



CSE 250 SPRING 2012 BOWLES ASSIGNMENT RECURSION AND PROBABILITY DISTRIBUTION (1) an=lan-1 + 6 ous oups + oups an = 20n - 20n-1 an-lan-1 2 0 60 - 8/60-1 = O (+ 60-1) 10-7 3 O 6/27 arsyle, 00 = 41 (P), -0 On 2 A A 22A+5 -A 2 B A 2-6 nole) =-6 an = 24/25-6 010 3 d1 (2) - 6 = 3 d127 On = 2 4 (21) - B (Ans)

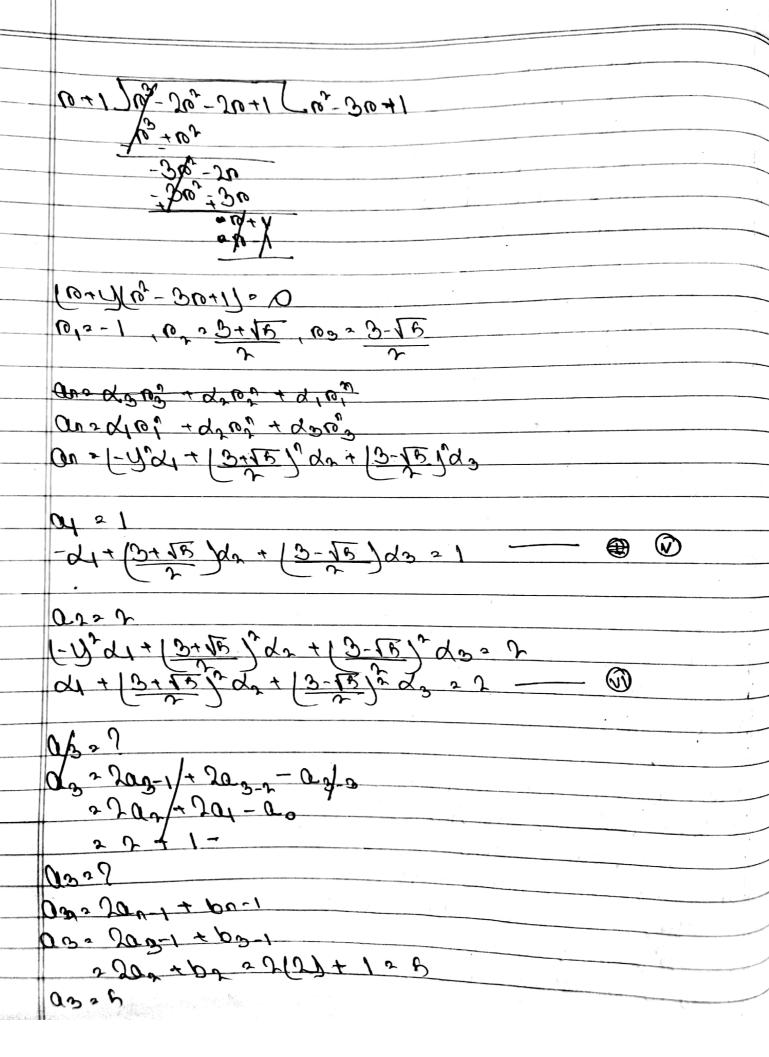
(3) Our you-1 + ou-3 + 20 an = any + ance) any = an - 2an-1 - an-2 an - 20n -1 - an-2 = 0 6, - 50-1 - 6-5 = 0 (+6,-5) p - 20 - 1 = 0 61 = 1+15 '65 = 1-15 ans = 410, + 2202 = (1+ 52) dy + (1-52) d2 On = AIN + AD On = 2 (A1(n-1) + A0) + A1(n-2) + A0 + An AIN+AO = 2AIN = 281 + 2AO + AIN = 281 + AO + AN Am + Ao = A (2A++ A++ B) + (2A++2Ao = 2A+ +Ao) = 1(BA1+B) + BA0 An + Ao = 3A1n + 3A0 + Bn - 1A1 -2A,n + 2A0-Bn = 0 +4A1 = 0 1 MA1-6) + 2A020+4A120 1 (-2A1-5) 20 | 2A020+4A120 12A0 20+4 (3) 20 A02-5 9657 5-P V-P On 2 (1+12) x1 + (1-52) d2 - 50-8 (1+12)d1+(1-12)d2-12 = 0

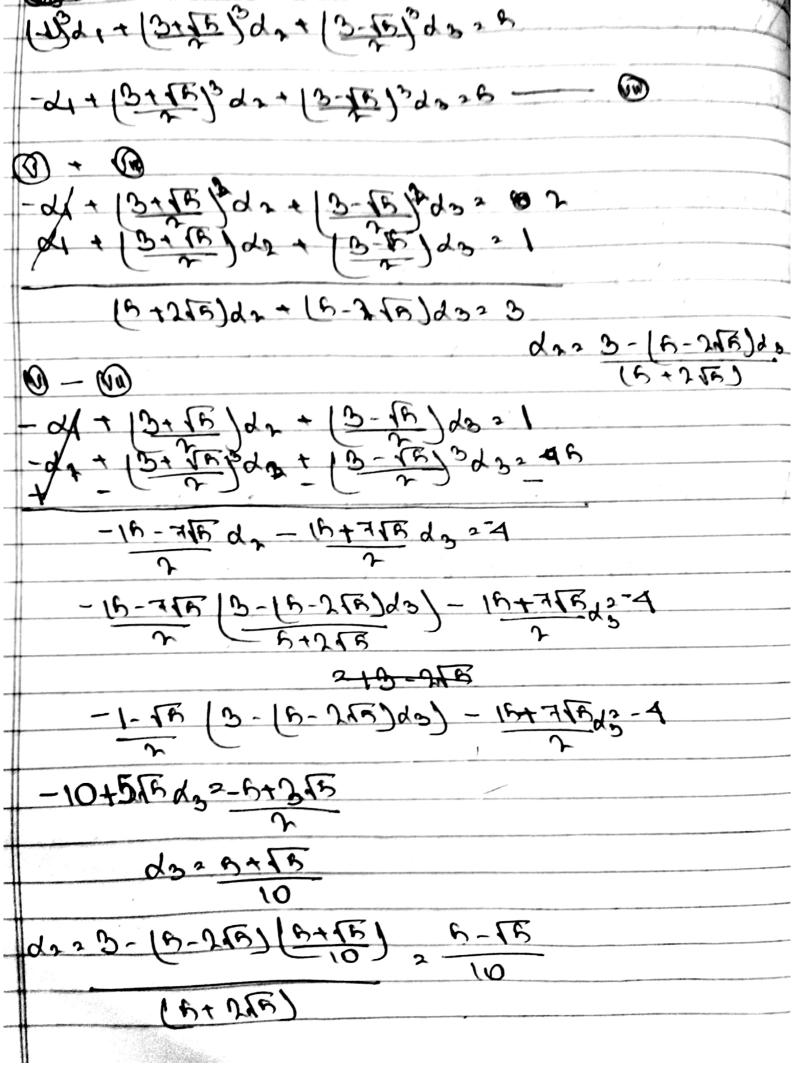
7-11+ WESTERS (1+12), 91+ (1-12), 92-5 (3)-8-8 4 (1+127, x1+ (1-127, x2 = 14 d1 = 21 - (1-12)d2 (1+12) 21 - (1-12)d2 + (1-12) d2 = 14. 21 - (1-12)d2) + (1-12)2d2 = 14 dr 2 - 28 = 39 12 (1+12) dy 2-18+35-12 OUS-J8+3815 (1+12), - J8-3812 (1-12), - & U-B (448)

(3) ano 200-1 + an-2 + 500 n2-1 or = our + or (0) anch) = con - 2an-1 - con-2 an - 20n-1 - an-2 2 0 6, - 56, - 0 . 0 (+ 4, 1) 6- - 50-1 = 0 0,21+12,0201-12 aning = dioi + dros ans = (1+12)d1 + (1-12)d2 Och 2 A20 + A10 + 40 A20 + A10 + A0 22 [A210-13 + A1(0-1) + A0) + A2(0-2) + A1(0-2) + A0 + V-1 A20 + A10 + A0 = 2 | A20 - 2A20 + A2 + A10 - A1 + A01 + A202 - 4A20 + 4A2 + Ain-2AI + Fo Ann + Ann + Ao + 3Ann - SAnn + ban + 3Ann - 4A1+3A0 + n-1 - 2A2n+ 8A2n-6A2-2A1n+4A1-2A0 2 n-1 1-1-2A2 +0(BA2-6A22A1) + (AA1-6A2-2A0) = 12-1 -2A221 |8A2-2A120 |AA1-6A2-2A02-1 A22-1 18(-12)-2A120 4621-6(-12)-2A02-1 1 Ao 2 6 - 2 On 3 - Tu = Ju+p-J an 2 8 (1-12) dy + (1-12) d2 - 1 2 - 30-5 Q 2 3 [++7]d1+(1-+7)d2-1(1)-223 (1+12)d1+(1-12)d2 = 18 - 0

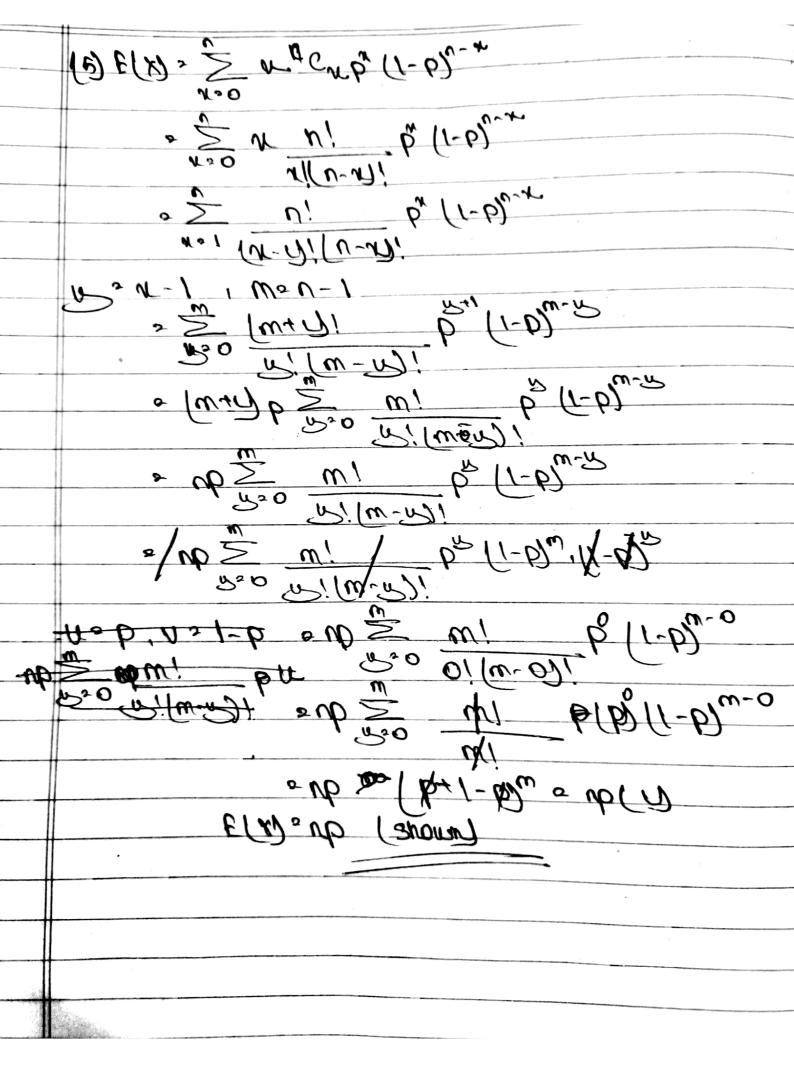
Or 24 (1+13), 91 + (1-127, 92 - 12 - 6) (1+137, 91 + (1-127, 92 - 7 (52, - 8)(27-3 - 5 = 4 4 = 15 - (1-12)dr -(1+12) (1+12)2 [1-12) + (1-12)2 d2 = 15 (4-212) dr = (1-12) dr = 12 A-212) dr = 9-1612 450-1J-5112 913 12 - (1-127) (-15-5115) x12-15+3115 OU 5-15+3125 (1425) - 15-5125 (1-15) - 1 y-50-5 (402)

(4) On a 20001 + born bn 2 bn-1 + On-1 an-bn = 2an-1 +bn-1 - (bn-1 + an-1) 2 200-1 + bp-1 - bp-1 + On-1 On-bn 2 On-1 --- 0 Put nonal in basbant + and bn+1 = bn+1-1 + an+1-1 an + pu = pu+1 - 0 On - bx = On-1 an + kn = bn+1 2an 2 and 4 bat - (1) Put non-2 in and Jan- + bant eq @ An-2 3 20 non + 6 n-2-1 Qn-2 2 20n-3 1 bn-3 200-2 2 an-2-1 + bn-2+1 20n-2 2 an-3 + bn-1 pa-1 3 Jan-2 - an-3 - 0 Put og @ in an 2 Jan-1 + bn-1 an = 20n-1 + (20n-2 - an-3) ans 200-1 - 200-2 - ans an - 2an - 2an - 2 + an - 2 = 0 6, - Ju, - Ju, + 86, 5 = 0 (-, 6, s) (047) 12 0 fortor of 62-30,-3041





-d1+ (3+15) (9-15) + (3-15) (8+15) = 1	
-d1+x=x	
ana (B-15) * (3+15) + (B+16) (3-15) (Ams)	=
	-



 $= \frac{1}{2} \frac$ 100(x) = E(X(X-1)) + E(X) - E(X) $\frac{1}{2} \frac{1}{2} \frac{1}$