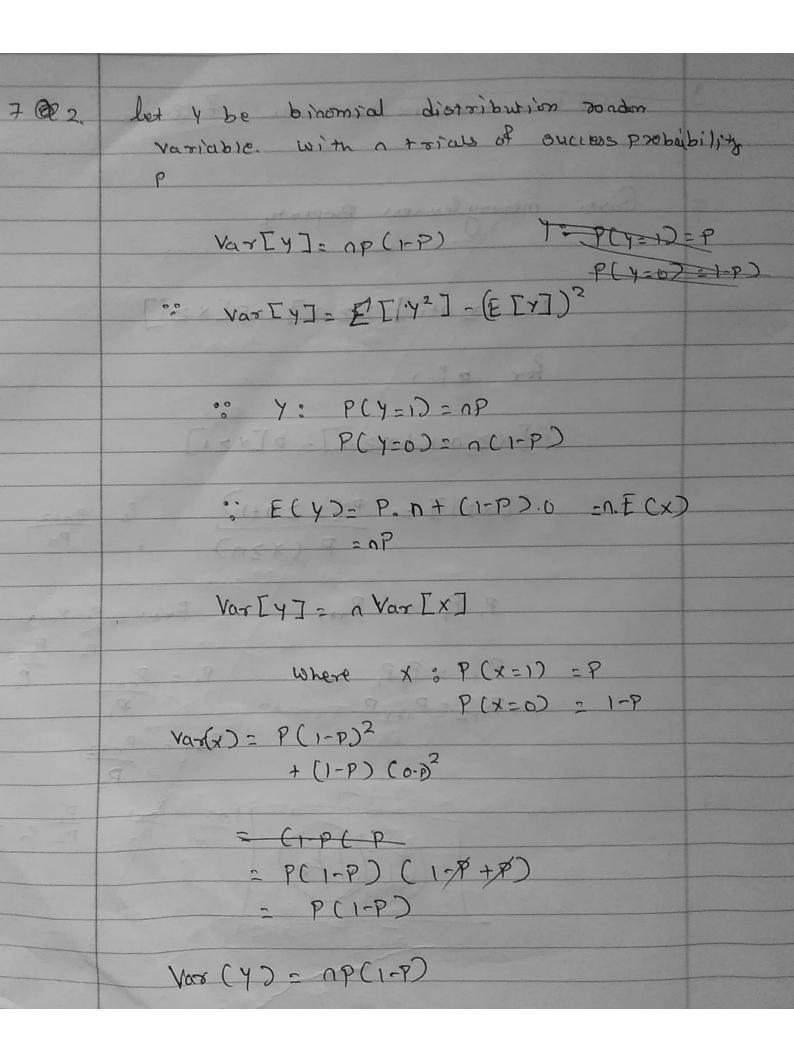


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Grives Memoryless Property. 7. 3. let x on Greo CP) We assume that x is Geometric' rundom Variable then X: PCI-PD where n=0,1,2,3. LHS = P(xzi) = 2 P(1-P)\$ = PCI-PJi = (1-P)' - P Rhs = P(x > n+1 - | x > n) P(x>n+i) P(1-P)?+1 herce of this property true for x as geometric where for p is me probability of Correctness. of an event.

PG (0,1)

7.8. 4	Given Possisson Distribution	10
	P[x=x]==================================	
	131d Blook advoce - 3 3M9 mag - St	
	Var [x] = E(x2) - [E(x)]2	
	uso - Mars - Frex 19	
	. 056	
	as Calculate before $E(x^2) = \chi^2 + \chi$	
	( ECXDER	
	$\frac{1}{2} = \frac{2}{2} \left( \frac{1}{2} \right) \frac{1}{2} = \frac{1}{2} \left( \frac{1}{2}$	
	$\alpha_{-1}$ $\alpha_{-1}$ $\alpha_{-1}$ $\alpha_{-1}$ $\alpha_{-1}$	
· model	2 e-2 e2	
100.00 Pa	2 2	
	Var[x] = 22+2-2=2	***************************************
	$E(x^3) = E(x^2-3x^2+2x+3x^2-2x)$	
	$E(x^{0}) = E(x^{0}-3a^{2}-2a^{2}-2E^{2})$ = $E(x^{0}) = E(x^{0}-1)(x^{0}-2)]+3E(x^{0})-2E(x^{0})$	Cac
	$= \lambda^{3} + 3(\lambda^{2} + \lambda) - 2(\lambda)$	
	$= \chi^3 + 3\chi^2 + 3\chi - 2\chi$	
	$= \lambda^3 + 3\lambda^2 + \lambda$	
	3 20 -2-3	
	$E(\alpha(\alpha-1)(\alpha-2)) = \lambda e^{\frac{3}{2}} \frac{\lambda^{\alpha-3}}{\alpha-3}$	
	= 23 e-2 e2 = 3	
	= x e e = z x	