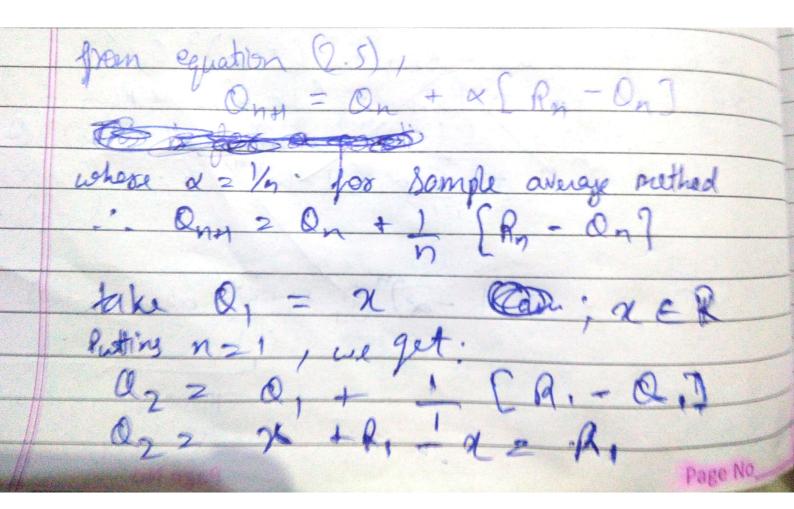
I have that the sample mean is not influenced by the initial choice of 0,(a), to, where as when writing a constant step-size & me estimate 0,(a) is function of 0,(a). Also, show that me defendence is larger for a smaller & loopore a method such that we can have to a constant step-size but no dependence of 0,(a).



is chosen, no matter what Care II: & is constant s.t & E(0,1)

b/c from (2.6): $Q_{n+1} = (1-\alpha)^n Q_1 + \sum_{i=1}^n \alpha(1-\alpha)^{n-i} R_i$ If we take In = x/on as our time step & is a constant some and On = On=1 (1- x) + x ; 00=1 Claim: Using In as a time-step we can be have a contains time-step which that an is independent B, 2 ×/0, $0, = 0_0(1-\alpha) + \alpha = \alpha$ $\beta = \alpha/\alpha = 1$ 2 2 Q + B, [R, -Q,]

Oz 2 Q + B, -Q, = R,

Oz 2 Q + B, [R_2 - Q_2] which is independent

of Q,

80 on Oy, Ors..., On will be independent

9 Q,