07 September 2022 09:45

Recap

Binomial proces:-

X = no. of snecess is a Biromid h.v.

Oue A large chain retailer purchases a certain kind of electronic device from a manufacturer. The manufacturer indicates that the defective rate of the device is 3%.

(a) The quality inspector rendomly picts 20 items from a shipment. What is the probability that there will be at least one defective item in these 20 picked items.?

(b) Suppose that the retailer receives 10 shipments in a month and the inspector randomly tests 20 devices per shipment.

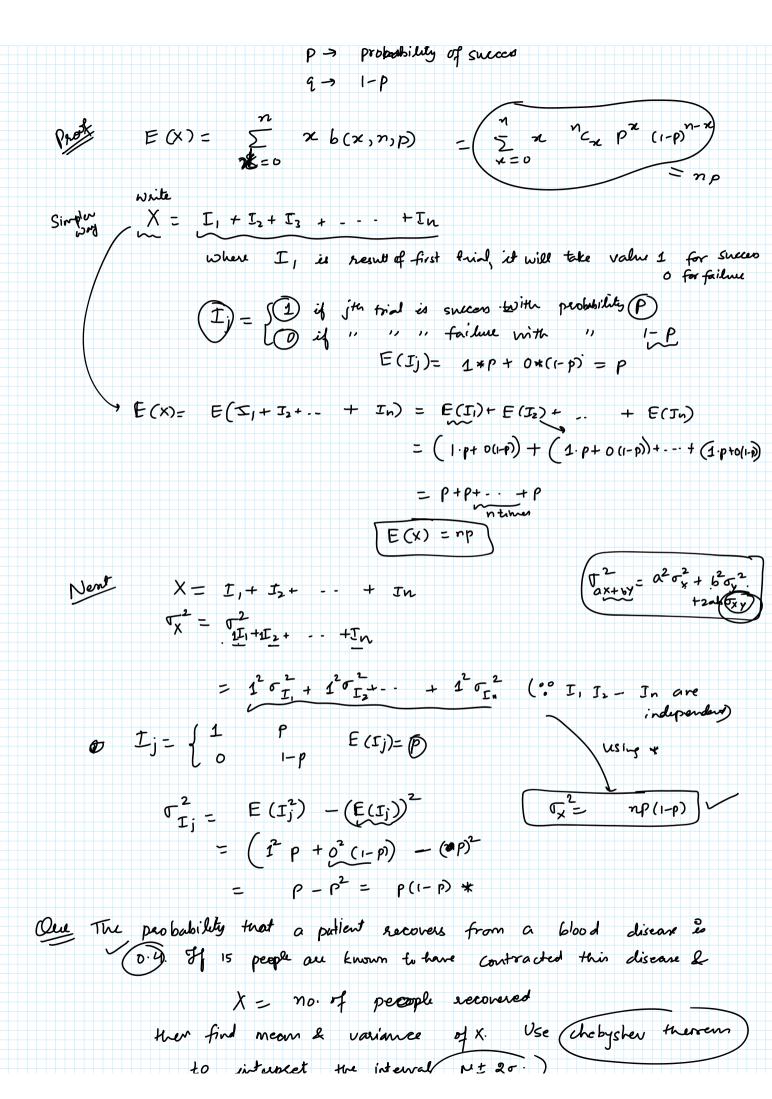
What is the probability that Be there are exactly 3 shipments

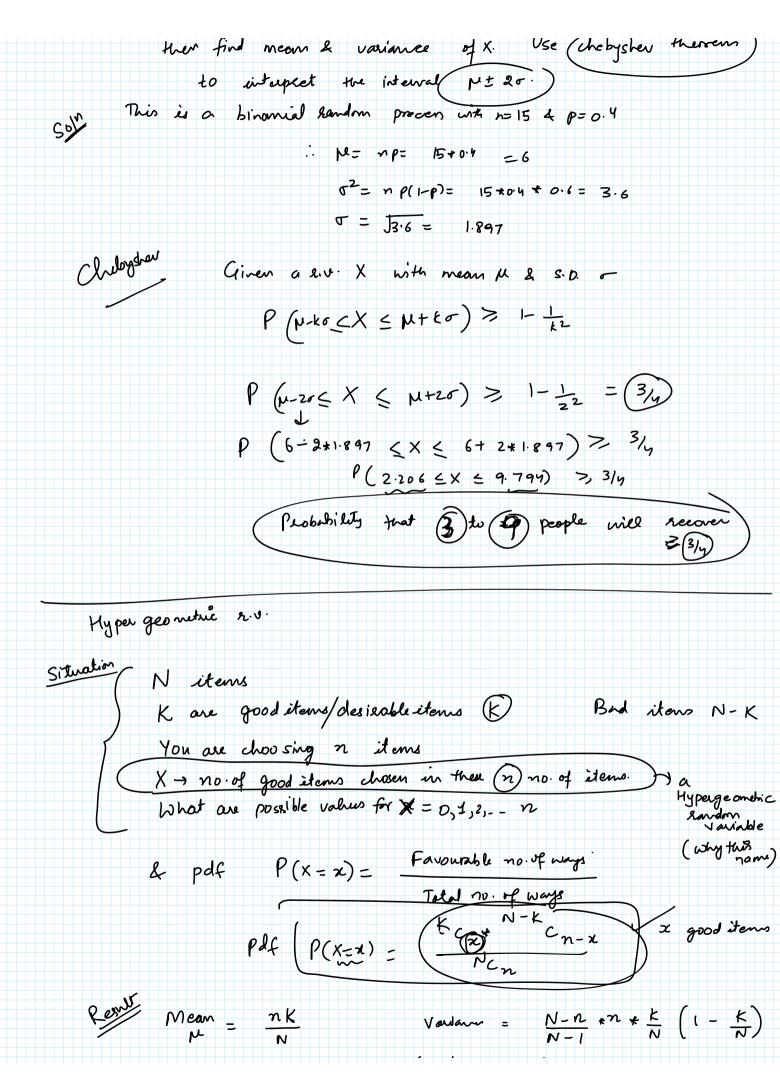
containing at least & defective piece in the 20 selected pieces.

(Ans. 0.1602)

Mean and Variance of Binomial E.V.

①
$$E(x) = np$$
 & ② $\sigma^2 = npq$
Where $n \rightarrow no \cdot of trials$





Problem Nent dans

(without proof)