Related Problem with Solution :

The mean and variance of a Binomial distribution is 4 and 3 respectively. Find its parameters.

Soln :

In binomial distribution, mean = np and variance = npq

Here given np = 4 and npq = 3

So q = 3/4

$\Rightarrow$ p = 1 – q = 1/4

p = 4

$\Rightarrow$ n(1/4) = 4 (from above observation)

Hence n=16, p=1/4 and q=3/4