KFUPM	Term 171	Date: 20/2/2018
Mathematics & Statistics	AS 483	Duration: 20 minutes
	Quiz# 3	
Name:	ID #:	Section:

Q1: You are given: $p_1^M = \frac{1}{6}$ $p_2^M = \frac{1}{9}$ and $p_3^M = \frac{2}{27}$ Fine p_0^M

Q2: For a frequency distribution in the (a,b,0) class, you are given

- $p_k = 0.0768$
- $p_{k+1} = p_{k+2} = 0.08192$
- $p_{k+3} = 0.0786432$

Determine the mean of this distribution.

Q3: Suppose that $N \mid \Lambda$ has a binomial distribution with parameters Λ and $q=0.4$ Suppose that Λ has a probability function defined by $p(1) = p(2) = p(3) = p(4) = 0.25$ Calculate the unconditional variance of N.