# COMP5416 Assignment 2

## Question 1

Assume that packets from each host arrive according to a Poisson process independently of other hosts. Find the minimum gateway buffer size (in octets) to ensure a packet loss probability of not more than 0.001 at the gateway for any utilization that does not exceed 90%.

As we know that the utilization should not exceed 90%, and the occupancy , since we already know that therefore in order to keep the occupancy less than 90%,  
therefore