

**Stat 479**  
**Fall 2009**  
**Quiz 5**  
**October 15, 2009**

1. Claim frequencies are distributed as follows:

<b>N</b>	<b>Probability</b>
0	0.1
1	0.2
2	0.3
3	0.4

Claim severities are distributed as follows:

<b>X</b>	<b>Probability</b>
1	0.25
2	0.75

Calculate the Net Stop Loss Premium for an aggregate deductible of 4.5.

2. The number of claims for dental insurance is distributed as a Poisson distribution.

The amount of each individual claim is follows a gamma distribution with  $\alpha = 2$  and  $\theta = 100$ .

The  $\text{Var}[S] = 138,000$ .

Calculate the expected value of the aggregate claims.