

Quiz 3
STAT 479
September 16, 2010

1. The number of dental claims during each year for each insured are distributed as a Poisson distribution with a mean of 2.5. The claims can be split between those attributable standard cleanings and those attributable to “other causes” with 90% being attributable to standard cleanings.

Calculate the probability that an insured has more than two claims attributable to “other causes” to other causes during a five year period.

2. The number of auto accidents is distributed as a zero-modified geometric distribution with $\beta = 9$.

The probability of less than 3 claims is 0.757.

Calculate p_0^M .