Math 477 "QUIZ" for Lecture 9

NAME: (print!) _____

E-MAIL ADDRESS: (print!) _____

1. The number of days an employee is sick each year is modeled by a Poisson distribution with mean 10. The number of sick days in different years are mutually independent. Calculate the probability that an employee is sick more than 35 days in a three-year-period. Leave your answer in $\sum$ notation, do not evaluate.

2. An actuary discovers that policyholders are four times as likely to file one claim as to file two claims. If the number of claims filed has a Poisson distribution, what is the standard deviation of the number of claims filed?