Math 477 REAL QUIZ #4

NAME: (print!) _____

E-MAIL ADDRESS: (print!) _____

1. (5 points) An actuary discovers that policyholders are four times as likely to file three claims as to file four claims. If the number of claims filed has a Poisson distribution, what is the second moment of the number of claims filed?

2. (5 points) A certain loaded die has $P(X = 1) = 0.5, P(X = 2) = 0.1, P(X = 3) = 0.1, P(X = 4) = 0.1, P(X = 5) = 0.1, P(X = 6) = 0.1$. If you roll it 100 times, what is the expected number of times it lands on even integer? What is the standard-deviation?