Paul Avery PHZ4390 Oct. 21, 2013

## Bonus Question 7 Due Wednesday, Oct. 30

- 1. (5 pts) Plot using wxMaxima or another program the Poisson distribution for  $\mu = 60$  and the Gaussian distribution that has the same mean and standard deviation.
- 2. (5 pts) For the Poisson, use wxMaxima or another program to calculate the probabilities for the count being within  $\pm 1\sigma$  and  $\pm 2\sigma$  of the mean. Compare these numbers to the corresponding interval for the Gaussian.