Group_____ Names_____

Group Quiz for Section 4.4

1. Suppose X is a Poisson random variable with parameter $\lambda > 0$; that is, X has probability mass function

$$p(k) = \frac{e^{-\lambda}\lambda^k}{k!}, \qquad k = 0, 1, \ldots$$

For what value(s) of k is $p(k)$ maximized? *Hint:* consider the ratios $\frac{p(k)}{p(k+1)}$.