BIOC 455/555
Fall 2016
Homework # 6
Due at the beginning of class on Thursday, October 13th.

The exponential distribution describes a continuous random process whose
random variates, x, are non-negative. The PDF of the exponential distribution is:

$$P(x) = \lambda e^{-\lambda x},$$

where λ is a positive constant and $x \in [0, \infty)$.

1. Show that $P(x)$ is normalized.

2. Find the first moment of $P(x)$.

3. Find the second moment of $P(x)$.

4. What is the CV?

5. What is the CDF for the exponential distribution?