ECE 302 Quiz 5
(10 points)

Name: _____ (3 points)   07/19/2016

1. Let X and Y be random variables with means μ_X, μ_Y, variances σ_X^2, σ_Y^2 and correlation coefficient ρ_{XY}. **Show all work. Express all answers in terms of the given parameters.**

   (a) (3 points) Find $\text{Cov}[X, Y]$.

   (b) (4 points) Find $\mathbb{E}[(aX + bY)^2]$, where a and b are constants.