

EECS 461 Probability and Statistics

Fall Semester 2022

Assignment #11 Due **8 November 2022** (Yes, this is the day after the midterm exam)

Reading: Sections 5.9 - 5.10 in Yates/Goodman

Do all of the Quizzes in the Reading assignment but do *not* hand them in. Answers to the Quizzes are on the book's website (search Yates Goodman Wiley)

For all problems from the book, you should use the method(s) from the corresponding section to solve the problem.

1. A random voltage is measured at 2 time instants. Let the RVs X and Y represent those 2 measurements. Both X and Y are Gaussian with mean=0 and variance=4 watts. These 2 measurements are determined to be uncorrelated. Write the joint PDF of the 2 measurements.
2. Problem 5.9.10, p. 215.
3. Problem 5.10.2, p. 215.