UNIVERSITY OF PITTSBURGH
Department of Electrical and Computer Engineering
ECE 2521 Analysis of Stochastic Processes
Homework 6   (Fall 2021)

Assigned: Oct 25
Due: Nov 6
References: Secs. 6.1 - 6.5, 7.1 (Leon-Garcia)

Problem 1: Text problem 6.7 (page 349).

Problem 2: Text problem 6.22 (page 351).

Problem 3: Text problem 6.35 (page 352).

Problem 4: Text problem 6.57 (page 354).

Problem 5: Text problem 6.72 (page 356).
- For simplicity, assume that the mean of X is zero (i.e. $E[X] = 0$).
- Examples 6.26 (page 333) and 6.29 (page 338) will be useful in guiding you through the problem.

Problem 6: Text problem 7.3 (page 402).

Optional Problem (no need to hand in):

Problem 7: Text problem 6.73 (page 356).
- Section 6.5.4 may be helpful to solve this problem.