

Math 447 - Spring 2024 - Homework 09

Published: Tuesday, March 6, 2024

Status - Reading Assignments:

Here are the reading assignments you were asked to complete before the first one of this HW.

WMS (Wackerly, et al. Textbook): ch.1 - 4.10

MF447 lecture notes: Ch.1 - 8.8

Other: Nothing assigned yet

New reading assignments: SAME AS THE HW 8 READING ASSIGNMENTS!

- When studying the WMS book, be sure to pay extra attention to the examples!

Reading assignment 1 - due Monday, March 11:

- a. Carefully read WMS ch.5.1 – 5.3. You already have encountered the material in MF ch.8.

Reading assignment 2 - due Wednesday, March 13:

- a. Carefully read WMS ch.5.4 – 5.6. You already have encountered the material in MF ch.8.

Reading assignment 3 - due Friday, March 15:

- a. Carefully read WMS ch.5.7 – 5.9. You already have encountered the material in MF ch.8.

Written assignments are on the next page.

Written assignments - Not collected for grading:

Remember that **some of those assignments will be relevant for the quizzes and exams.**

(a) Write from memory the following definitions and compare them with the MF lecture notes:

- The multivariate extensions for CDFs, PMFs, PDFs.
- The CDFs, PMFs, PDFs for marginal and conditional distributions
- Independence of random elements and random variables (not in scope for midterm 2)

(b) Review the formula sheet for midterm 2

(c) All WMS exercises below are odd-numbered, so the solutions are in the book.

They are identical to those you saw in HW8.

- WMS ch.3.9 exercises: #3.145, 3.147, 3.153,
- WMS ch.3.11 exercises: #3.167, 3.171, 3.177
- WMS ch.4.2 exercises: #4.1, 4.7, 4.11, 4.17
- WMS ch.4.3 exercises: #4.25, 4.31, 4.11, 4.17
- WMS ch.4.4 exercises: #4.1, 4.51
- WMS ch.4.5 exercises: #4.59, 4.71, 4.77
- WMS ch.4.6 exercises: #4.59, 4.81, 4.91, 109
- WMS ch.4.9 exercises: #4.145
- WMS ch.4.10 exercises: #4.147