Math 447 - Spring 2025 - Homework 12

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Status - Reading Assignments:

Here are the reading assignments to be completed before the first one of this HW.

WMS (Wackerly, et al. Textbook):

ch.2 - ch.5.11 (skip 3.10, 4.11) 6.7

MF447 lecture notes:

ch.1 - ch.5, ch.6 (skim), ch.7 - ch.11

Other:

Nothing assigned yet

New reading assignments:

Really important for the WMS reading assignments: Work through the examples!

Reading assignment 1 - due: Monday, April 7:

a. Carefully read MF ch.12.1 and WMS ch.6.2-6.3 (Multinomial Probability Distribution). Work through all examples!

Reading assignment 2 - due: Wednesday, April 9:

a. Carefully read MF ch.12.2 and WMS ch.6.4. Work through all examples!

Reading assignment 3 - due Friday, April 11:

- **a.** Carefully read MF ch.12.3 and WMS ch.6.6. Note that this material is guaranteed to appear on the final and potentially also on midterm 3!
- **b.** Carefully read MF ch.12.4 and WMS ch.6.5.

General note on written assignments: I will not collect those assignments for grading but doing them might be helpful for your quizzes and exams. Be sure to work the examples!

Written assignments are on the next page.

Written assignments:

- (a) Work closed book through the examples given in the assigned reading, both in MF and WMS.
- **(b)** Write from memory the definitions and theorems of MF ch.12. Be sure that you can get Theorem 12.1 and its multidimensional generalization, Theorem 12.2, essentially right.
- (c) All WMS exercises below are odd-numbered, so the solutions are in the book.

WMS ch.5.9 exercises: #5.119, 5.123
WMS ch.6.3 exercises: #6.1, 6.3, 6.9
WMS ch.6.4 exercises: #6.23, 6.31, 6.35

• WMS ch.6.5 exercises: #6.37, 6.39

• WMS ch.6.7 exercises: #6.73, 6.83, 6.87

Selected answers:

None, since all answers to (a) can be found in WMS and the lecture notes.