

Homework for Math 2270 - 002, Fall 2020

A. Treibergs, Instructor

December 2, 2020

Our text is by David C. Lay, Steven R. Lay and Judi J. McDonald, *Linear Algebra and its Applications*, 5th ed. Please read the relevant sections in the text as well as any cited reference. Assignments are due the following Friday, or on Nov. 30, whichever comes first.

Your written work reflects your professionalism. Make answers complete and self contained. This means that you should copy or paraphrase each question, write in complete sentences, provide adequate explanation to help the reader understand the structure of your argument, be thorough in the details, state any theorem that you use and proofread your answer.

It also means that you do your own work. You can talk to other students about the problems, but you should write the solutions on your own. Copying from other students or the internet is cheating and plagiarism and against your student code. If you must use a source other than your textbook, being professional means that you provide a citation.

Homework from Wednesday to Tuesday will be due Friday. Late homework that is up to one week late will receive half credit. Homework that is more than one week late will receive no credit at all. Homework should be uploaded to Canvas by 4:00 pm Friday afternoon to be considered on time.

The home page is the official listing of homework assigned for the week and takes precedence in case there is any discrepancy with the problems mentioned in class.

Please hand in problems A on Friday, August 28.

A. Exercises from Sec. 1.1 of the text

10[2, 8, 12, 16, 20]

Please hand in problems B on Friday, Sept. 4.

B. Exercises from Sec. 1.2 – 1.3 of the text

21[4, 10, 12, 14, 18, 20]

32[12, 14, 18, 28]

Please hand in problems C on Friday, Sept.11.

C. Exercises from Sec. 1.4 – 1.7 of the text

40[16, 18, 34]
48[11, 26]
55[7, 14]
61[6, 12]

Please hand in problems D on Friday, September 18.

D. Exercises from Sec. 1.8 of the text

69[4, 9, 11, 19, 28]

Please hand in problems E on Friday, September 25.

E. Exercises from Sec. 1.9 – 1.10 of the text

79[1, 7, 17, 25]
87[1, 7, 9]

Please hand in problems F on Friday, October 2.

F. Exercises from Sec. 2.1 – 2.3 of the text

102[11, 22, 25]
111[8, 15, 21, 31, 34, 35, 39, 40]
117[1-7, 13, 15, 24, 27, 36]

Please hand in problems G on Friday, October 9.

G. Exercises from Sec. 2.5 and 2.6 of the text

131[1, 11, 12, 17]
138[9, 10]

Please hand in problems H on Friday, October 16.

H. Exercises from Sec. 2.8 – 3.1 of the text

153[6, 25, 37]
159[5, 9, 14, 22]
169[4, 13, 15]

Please hand in problems I on Friday, October 23.

I. Exercises from Sec. 3.2 – 4.1 of the text

177[9, 14, 23, 25, 30, 36]
188[6, 14, 27]
197[2, 8, 20, 27, 30]

Please hand in problems J on Friday, Oct. 30.

J. Exercises from Sec. 4.2 – 4.6 of the text

207[7, 30, 31, 33]
215[19, 26, 31]
224[12, 20, 32, 33]

Please hand in problems K on Friday, Nov. 6.

K. Exercises from Sec. 4.5 – 4.7 of the text

231[22, 24, 25]
238[19, 27, 29]
244[1, 9, 14, 19]

Please hand in problems L on Friday, Nov. 13.

L. Exercises from Sec. 5.1 – 5.4 of the text

273[19, 25, 31]
281[Find eigenvalues and eigenvectors for 8 and 11, 27]
288[11, 18]
295[5, 8, 12, 15, 30]

Please hand in problems M on Friday, Nov. 20.

M. Exercises from Sec. 5.5, 6.2 of the text

302[4, 8, 13, 24]
338[14, 24, 29, 31]
346[10, 13, 21, 25, 29]

Do not hand in problems N. You will be tested on this material in the final.

N. Exercises from Sec. 6.3 – 6.8 of the text

354 [5, 10, 14, 17, 19, 23]
360 [7, 12, 14, 16, 19, 22]
368 [3, 5, 7, 15, 19]
384 [4, 6, 8, 9, 14, 18, 25]
401 [17, 19, 30]

The FINAL is Wed., Dec. 11, 1:00 – 3:00 PM will be an on-line canvas quiz.–

Half of the final will be comprehensive. The rest will over material covered after the fourth quiz, sections §6.2 – §6.5, §6.7 and §7.1.