Multivariable Calculus

Assignments

Format

Problem Sets have two parts, A and B.

Part A has problems from the text (Edwards, Henry C., and David E. Penney. *Multivariable Calculus*. 6th ed. Lebanon, IN: Prentice Hall, 2002. ISBN: 9780130339676), with answers to many in the back of the text, and problems from the 18.02 Supplementary Notes and Problems with solutions at the end of the Notes. Look at the solutions if you get stuck, but try to do as much as possible without them. Hand in the underlined problems only; the others are for more practice. Part A will be graded quickly, checking that the problems are there and the solutions not merely copied.

Part B consists of unsolved problems, is worth more points, and will be graded more carefully. Many of these problems are longer multi-part exercises posed here because they do not fit conveniently into an exam or short-answer format.

Advice: Make sure that you understand the problems by comparing your answers against the solutions, whether before (Part A) or after (Part B) the assignment is due. Keep up with the work in small installments - don't leave it all for a marathon session the night before the due date. You can't learn well under time pressure. To help you keep up, each problem is labeled with the day on which you will have the needed background for it.

Homework Rules

Collaboration on problem sets is encouraged, but

1. Attempt each part of each problem yourself. Read each portion of the problem before asking for help. If you don't understand what is being asked, ask for help interpreting the problem and then make an honest attempt to solve it.
2. Write up each problem independently. On both Part A and B exercises you are expected to write the answer in your own words.
3. Write on your problem set whom you consulted and the sources you used. If you fail to do so, you may be charged with plagiarism and subject to serious penalties.
4. It is illegal to consult materials from previous semesters.

Key to Notation

Hand in the underlined problems only; the others are for more practice.

Notation example:

12.1/17 = Edwards text, Section 12.1, problem 17

1A/1 = Supplementary Notes and Exercises: 1A-1

Assignments

Problem Set 1 (PDF)

Problem Set 2 (PDF)

Problem Set 3 (PDF)

Problem Set 4 (PDF)

Problem Set 5 (PDF)

Problem Set 6 (PDF)

Problem Set 7 (PDF)

Problem Set 8 (PDF)

Problem Set 9 (PDF)

Problem Set 10 (PDF)

Problem Set 11 (PDF)

Problem Set 12 (PDF)

MATLAB® Instructions (PDF) - Explains how to use the program MATLAB®, which students must use on some problem sets