

Homework Assignments for Calculus III, Fall 2009

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There are two media for homework in Calculus III.

There will be weekly online assignments administered through [WebAssign](#), WebAssign problems are computational in nature and assess the techniques introduced in class. You will get immediate feedback on your progress and will get several chances to ensure it.

Because one of the course goals is fluency in mathematical expression, there will also be problems to write up on paper each week and turn in. These problems will require more than just procedure, might connect two more more things together, and will more closely resemble the harder exam problems. They will normally also require written explanations in English sentences for full credit.

Normally WebAssign problems will be due the first class day of the week (Monday or Tuesday depending on your section), and written problems will be due on the last class day of the week (Wednesday or Thursday).

Once you are enrolled in your WebAssign section, you will see the list of assignments and their due dates.

Here is the list and schedule of the written problems. Dates listed are *Wednesdays*. If you are in a TR section, your assignments are due the day *following* the day listed.

Since both the paper version of Stewart's **Essential Calculus, Early Transcendentals** and the electronic version of Stewart's **Calculus, Early Transcendentals** are supported in this course, there are two numberings for the problems. If a problem assigned from **Essentials** appears in the full version, the right-hand column lists the full version number. If a problem is not in the full version, there is a link to a PDF with the statement of that problem. Generally, if you're using a paper text, you probably want the first column, while if you're using an electronic text, you probably want the second.

Num-ber	Due	Problems (<i>Essential Calculus</i> numbers)	Problems (full version numbers)
1	9/16	10.1.26, 10.1.30, 10.1.36 ¹	12.1.28, 12.1.32, 12.1.40
2	9/23	10.2.28, 10.3.30, 10.4.40, 10.4.42	12.2.40, 12.3.44, 12.4.44, 12.4.46
3	9/30	10.5.42, 10.5.54, 10.6.16, 10.6.34	12.5.64, 12.5.76, 10.6.16 , 12.6
4	10/7	10.7.38, 10.7.72, 10.8.10, 10.9.26	10.7.38 , 13.2.44, 13.3.16, 13.4.30
5	10/21 ²	11.1.32, 11.2.20, 11.3.38, 11.3.70, 11.4.14	14.1.46, 11.2.20 , 14.3.44, 14.4.86, 14.4.14
6	10/28	11.5.30, 11.5.36, 11.6.28, 11.6.38	14.5.36, 14.5.44, 14.6.28, 11.6.38
7	11/4	11.7.42, 11.7.44, 11.8.10, 11.8.24	14.7.50, 14.7.52, 14.8.12, 14.8.26
8	11/11	12.1.4, 12.2.36, 12.2.44, 12.3.30	15.1.4, 15.3.44, 15.3.52, 15.4.36
9	11/18	12.5.32, 12.5.46, 12.6.24(a), 12.7.34(a)	15.6.34, 15.6.52, 15.7.24(a), 15.8.38(a)
10	11/25 ³	13.2.16, 13.2.18, 13.2.30, 13.3.16, 13.3.32(a)	16.2.18, 16.2.20, 16.2.36, 16.3.18, 16.3.34(a)

Number	Due	Problems (<i>Essential Calculus</i> numbers)	Problems (full version numbers)
11	12/2	13.4.16, 13.4.22, 13.5.26, 13.5.32	16.4.14, 16.4.22, 16.5.28, 16.5.34
12	12/9	13.6.40, 13.6.58(a)(c), 13.7.16, 13.7.24	16.6.44, 16.6.60(a)(c), 13.7.16 ⁴ , 16.7.24
13	12/14 ⁵	13.8.8, 13.8.12, 13.9.18, 13.9.20, 13.9.24	16.8.10, 16.8.14, 16.9.18, 16.9.20, 16.9.24

Grading of Homework

One of the goals of this course is for you to learn how to think and communicate mathematically. This means that your homework problems should be written up with justification and explanations of your steps in English. See the examples in the textbook for examples of how to write up solutions to a problem well.

Some exam problems will also ask for justifications, so this will be good practice.

Each problem will usually be worth 3 points. Graders will grade each three-point part according to the following rubric:

Points	Description of Work
3	Work is completely accurate and essentially perfect. Work is thoroughly developed, neat, and easy to read. Complete sentences are used.
2	Work is good, but incompletely developed, hard to read, unexplained, or jumbled. <i>Answers which are not explained, even if correct, will generally receive 2 points.</i> Work contains "right idea" but is flawed.
1	Work is sketchy. There is some correct work, but most of work is incorrect.
0	Work minimal or non-existent. Solution is completely incorrect.

Exceptions

Your lowest homework score will be dropped when computing your average for the final grade. This means you can take a "free spin" for any reason you want, be it time to spend on another class, a family emergency, or an unusually packed social calendar. In fairness to the graders and other students, *late homeworks will not be accepted.*

¹ The notation *m.n.p* means problem #*p* from Section *m.n* of the textbook.

² The midterm will be October 14 or 15. No homework will be collected that week.

³ The written assignment due Thanksgiving week will be collected on November 25 for both MW and TR sections.

⁴ Here is problem 13.7.16: Find $\iint_S xyz \, dS$, where S is the part of the sphere $x^2 + y^2 + z^2 = 1$ that lies above the cone $z = \sqrt{x^2 + y^2}$

⁵ The final problem set will not be collected or graded. Solutions will be published on the websites, however.