

Mathematics 110 – Calculus of one variable

Trent University 2003-2004

HOMEWORK SET #1

Here are some suggested homework exercises from the text. Just to remind you, the text is:

Calculus: Early Transcendentals – (5th edition), James Stewart
Brooks/Cole Publishing Co., 2003, ISBN 0-534-39321-7

Solutions will not be collected or marked, but feel free to ask about any of these problems and any others you try in tutorial or in office hours. Most – probably not all! – quiz and test questions will be similar – but not identical! – to homework exercises.

We will not cover Chapter 1 in class – it should be material you’ve seen before, one way or another – but you might want to do some problems from it anyway to brush up on your skills.

1. §1.1 Exercises # 1, 3, 5, 7, 9, 15, 17, 19, 21, 23, 25, 33, 35, 39, 43, 45, 51, 53
2. §1.2 Exercises # 1, 3, 5, 7, 11, 19
3. §1.3 Exercises # 1, 3, 5, 7, 13, 15, 19, 23, 27, 31, 33, 35, 39, 43, 47, 55, 57
4. §1.5 Exercises # 1, 5, 7, 11, 13, 15, 17, 23, 25
5. §1.6 Exercises # 3, 7, 11, 17, 19, 21, 23, 25, 27, 31, 33, 37, 39, 41, 47, 49, 51, 53, 55, 59

Those interested in using fancy calculators or software should check out §1.4. Everyone should take a look at the extra section, *Principles of Problem Solving*, at the end of Chapter 1 (p. 80) and try a few of the exercises. Exercising those skills may come in handy doing problems, especially on the assignments.

We will begin with Chapter 2 in class, so make sure you do at least the following exercises as we go through the material.

1. §2.1 Exercises # 3, 5, 7, 9
2. §2.2 Exercises # 1, 3, 5, 7, 9, 13, 17, 21, 25, 29, 35
3. §2.3 Exercises # 1, 5, 9, 13, 17, 21, 25, 33, 35, 39, 41, 47, 49, 51, 53, 57
4. §2.4 Exercises # 1, 3, 5, 13, 15, 17, 21, 25, 31, 33, 37, 39
5. §2.5 Exercises # 1, 3, 5, 7, 11, 13, 17, 19, 23, 27, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55
6. §2.6 Exercises # 3, 5, 7, 11, 13, 17, 21, 23, 27, 31, 37, 39, 41, 45, 49, 51, 59
7. §11.1 Exercises # 5, 7, 11, 13, 15, 19, 25, 31, 33, 35, 37, 41, 43, 45, 47, 49, 53, 55, 59, 61, 68
8. §2.7 Exercises # 1, 3, 5, 7, 9, 11, 15, 19, 25, 27
9. §2.8 Exercises # 1, 3, 5, 7, 9, 13, 17, 19, 21, 23, 25, 27, 33
10. §2.9 Exercises # 3, 7, 9, 13, 15, 19, 23, 27, 29, 33, 37, 41, 43, 45, 47

Last Things First

Solutions to problems
are easy to find:
the problem’s a great
contribution.

What is truly an art
is to wring from your mind
a problem to fit
a solution.

Piet Hein