Calculus Suggested Homework Problems

Section 2.2 1, 2, 4, 5-38, 61-64, 71, 72, 75-82 Section 2.3 1-46, 47-50, 51-100, 101-103 Section 2.4 1-70, 71-74, 75-88, 89-104, 109-114, 115, 124, 125 Section 2.5 1-59, 60-66, 67-70 Section 3.1 1-60, 67-76, 77-88 Section 3.2 1-40, 41-58, 59-70, 71-78, 79, 81-88, 89-105, 106-113, 115-116, 117-119 Section 3.3 1-30, 31-60, 61-88, 89-92, 94-96, 97-112, 113-116, 119-122, 123-124, 125-144 Section 3.4 1-2, 13-50, 57-94, 95-116, 117-118, 119-132-148, 153-156, 157-170, 173-176, 177-180, 181-184 Section 3.5 1-52, 53-58, 59-80, 81-89, 91, 93-95 Section 3.6 1-12, 13-16, 17-38, 49-66, 73-78, 79-82 Section 3.7 1-10, 11-16, 17-51 Section 3.8 1-30, 31-32, 33-34, 35-46

Section 4.1 1-24, 25-50, 51-70, 71-78, 79-80

Section 4.2 will be covered later. It will not be on test 2.

Section 4.3 1-4, 5-56, 57-90, 91-96, 97-102, 103-106, 107-112,

Section 4.4 1-2, 3-58, 59-70, 71-94

Section 4.5 1-12, 13-46, 47-62, 63, 64, 65-76

Section 4.2 **Yes it's out of order.** 1-64, 65-86

Section 4.7 1-56

Section 4.8 1-14, 15-33, 33-46, 47-54, 55-59

Section 5.1 1-14, 15-38, 45-48, 49-74, 76-78

Section 5.2 1-44, 45-46, 47-62, 63-72

Section 5.3 1-51, 52-64, 65-68, 69-76, 79-85

Section 5.4 1-8, 9-44, 45-59, 60, 61-113

Section 5.5 1-8, 9-28, 29-32, 33-34, 35-56, 57-72, 73-84, 85-106, 107-112, 113-118

Section 5.6 1-82, 83-116

Section 5.7 1-4, 5-28, 29-76, 77-84, 87-95, 96-100 Section 5.8 1-50, 51-62, 63-66, 67-78

Section 5.9 will be skipped

Chapter 6 will be skipped. It is an introduction to something called <u>differential equations</u> and is really fun if you're looking for some reading over winter break

Section 7.1 1-52, 75-86 Section 7.2 1-67 Section 7.3 1-61 Section 7.4 1-55 Section 7.5 1-49 Section 7.6 1-58 Section 7.7

1-36

Note: Not all sections in chapter 7 are equally weighted and some of them we will cover only briefly. I would consider their relative order of importance to be:

- (30) Applications involving movement
- (25) Integration between curves
- (15) Solids of revolution around an axis
- (10) Solids with a known cross sectional area
- (5) Integration with respect to *y*
- (5) Solids of revolution around a line
- (3) All other applications

Problems marked in purple as optional are problems that you can solve with the material we cover. They're interesting in some way – perhaps an application or example that goes jumps ahead in the course, or goes a little deeper than we'll typically need. However, it's not worth our time to talk about that problem during class. If you've mastered everything else, you might try these to reinforce your understanding of the concepts by applying them to things we haven't fleshed out as much!!

Problems marked in blue are somehow absolutely fundamental to the course. Under no circumstances should you even think about glossing over these problems.