Assignment 4: Integral Calculus
Weeks 5 and 6

In class on Monday, [Week 5, Day 12]: Project 2 is DUE. Review for test.
In class on Wednesday, [Day 13]: Test 1; part A of this test will be Benchmark 1
Friday: Long weekend, no classes

In class on Monday, [Week 6, Day 14]:

- I will go over the test, particularly the problems that were more challenging.
- I will present strategies for calculating partial fractions, and we will work on Web Works problem set Chap6_B. Then you are to attempt this problem set again.

- Homework:
  - If necessary, retake and pass the Benchmark by 4:00 pm on Monday, March 1.
    You may retake it the first time by 11:30 am on Friday, February 26, and a second time (if necessary) by 4:00 pm on Monday. In class on Friday, I will return papers of those who have attempted the first retest.
  - Web Work problem set Chap6_B has been reopened. Attempt these four problems by 8:00 pm on Tuesday, March 2. If you don't get them correct the first time, ask for help and try again.
  - Five additional Web Work problem sets have been prepared (Chap7_A, B, C, D, and E) which use methods from Section 7.2: *The Fundamental Theorem of Calculus*. You are to attempt all five of these problem sets. To get credit for attempting these, your score should be at least 80% of the total points possible. If you don't get a problem correct on the first attempt, try it again until you get it – or ask me about the problems that you find difficult. Most of these problems are drill-and-practice for calculating definite integrals, but each set has at least one problem that will make you think a little harder. These five problem sets are due on Wednesday morning, March 10, and are good practice problems for Test 2.

- Reminder: Test 2 is scheduled for Wednesday, March 10. It will include material from Chapter 8 that we will be covering over the next two weeks. As you know, all my tests are cumulative; Test 2 will cover the material that was on Test 1 … PLUS material from Chapter 8, Sections 8.1, 8.3, and 8.4. Test 2 will give you an opportunity to improve your grade in this course before midterm.

In class on Wednesday, [Day 15]:

- We will begin work on Section 8.3: *Numerical Approximation of Integrals*.
  This section builds on ideas that we have seen already in Section 7.1 and in Project 2. It also expands and deepens the ideas that underlie problem 1 in part B of Test 1.

In class on Friday, [Day 16]:

- We will begin continue to work on Section 8.3, by going through the Checkpoints, Activities, and Animations in your groups. You should complete all of these Checkpoints, Activities, and Animations on your own if you don't finish them in class on Friday.

In class on Monday, [Day 17]:

- We will begin work on Section 8.4: *Applying Differentiation Rules to Integration*.
  Integration is the inverse of differentiation, so we will think about what we did to calculate a derivative, and what we can do to un-do the derivative. Some derivatives are quite easy to un-do, while others present more of a challenge. We will probably spend two class periods on this section.
- Homework:
  - By 4:00 pm on Monday, March 1, you should have retaken the Benchmark if necessary.
  - By 8:00 pm on Tuesday, March 2, complete your work on Web Work Chap6_B.
  - Continue to work on Web Work problem sets Chap7_A, B, C, D, and E, and let me know if some of these problems are difficult.