Notes on the Final Exam, Math 141, Fall 2005

1. The Final Exam is Friday, December 9, 2PM, in our usual class room. The Final Exam is comprehensive. We will skip sections 6.7 and 6.9. Otherwise, every section listed on the homework list from 1.1 to 6.8 is covered on your Final Exam.

2. **Be certain to MASTER all of the assigned homework problems.** (Surely you noticed that every problem on Exam 4 came directly from the assigned Homework!)

3. Every problem on the old 141 exams which is covered on your Final Exam, EXCEPT:
   (a) Exam 1's:
      95: 5.
   (b) Exam 4's:
      00: 7, 8, 9.
      99: 1, 2, 9.
      96: 6.
      95: 13.
   (c) Exam 5's:
      96: 4, 6, 8.
   (d) Final Exams:
      00: 14, 15, 16, 19.
      99: 3, 7, 13, 14, 16, 19.
      96: 7, 19, 12, 14, 15, 16, 17.
      95: 14, 15, 16, 17.

4. The material on old 142 exams which is covered on your Final Exam:
   (a) Exam 1's:
      98: 1, 2, 4, 5, 6, 7, 9, 10.
      00: 1, 2, 3, 5, 6, 7, 8.
      01: 1, 2, 3, 5, 6, 7, 9.
      02: 1, 2, 3, 5, 6, 7, 9.
      Spring 04: 1, 2, 3, 4, 5, 6, 8, 10.
      Fall 04: 1, 2, 3, 4, 5, 6, 9, 10.
   (b) Exam 2's:
      98: 2, 4, 8.
      00: 9, 10.
      01: 7, 8, 10.
      02: 7, 8, 10.
      Spring 04: 2, 3, 6, 7, 10.

Fall 04: 1, 3, 5, 8.

(c) Exam 3's:

98: 2 This problem is the same as "Find $\lim_{n\to\infty}(1-\frac{1}{n})^{2n}$.", 7, 9.

00: 2, 5, 7.

01: 6 This problem is the same as "Find $\lim_{n\to\infty}(\frac{n-3}{n})^{n}$.", 7.

02: 1 (This problem is the same as "Find $\lim_{n\to\infty} n\sin(\frac{1}{n})$"), 2 (This problem is the same as "Find $\lim_{n\to\infty}\left(\frac{n-1}{n+1}\right)^{n}$").

Spring 04: 3, 7, 8, 9 (This problem is the same as "Find $\lim_{n\to\infty}\left(\frac{n-1}{n+1}\right)^{n}$").

Fall 04: 6, 7 (This problem is the same as "Find $\lim_{n\to\infty}\left(\frac{n+3}{n}\right)^{n}$").

(d) Exam 4's:

98: 9.

00: 11

02: 1 (This problem is the same as "Find $\lim_{n\to\infty} n\sin(\frac{3}{n})$").

Fall 04: 1 (This problem is the same as "Find $\lim_{n\to\infty} n\sin(\frac{1}{n})$").

(e) Final Exam's:

98: 4, 10, 11, 18.

00: 9, 10, 11, 12.

01: 13, 17.

02: 2, 8 (This problem is the same as "Find $\lim_{n\to\infty}\left(\frac{n-3}{n}\right)^{3n}$").

Spring 04: 4, 6, 12 (This problem is the same as "Find $\lim_{n\to\infty}\left(1-\frac{1}{3n}\right)^{n}$"), 13.

Fall 04: 1, 2, 3, 6, 9, 14 (This problem is the same as "Find $\lim_{n\to\infty}\left(\frac{n-1}{n}\right)^{n}$").