

**My Office Hours:** M & W 2:30–4:00, Tu 2:00–3:30, & F 1:30–2:30 or by appointment. **Math**

**Intern:** Sun: 2:00–5:00, 7:00–10pm; Mon thru Thu: 3:00–5:30 and 7:00–10:30pm in Lansing 310.

Website: <http://math.hws.edu/~mitchell/Math131F15/index.html>.

### Practice

**Test Thursday in Lab.** Volume, Work, Arc Length, Integration by Parts, Integration of Powers of Trig Functions, Integration Using Triangles. There are some practice problems online. Also review the labs.

1. (a) Review the **yellow handout on Triangle Substitution** and Section 7.4. If you have lost the handout, you can and should download it from the course website.
- (b) Read about Partial Fractions, Section 7.5 through Example 3 on page 545.
2. Practice On Triangles: Page 537 #7 (do as both a triangle problem and arcsine), 17, 25, 27, 31, and 33.

### Hand In

Triangle problems require a lot of practice. Make sure you “get it.”

0. WeBWork Day 24. The last three problem in the set are optional. Here’s a chance to earn some extra credit on WeBWork problems to make up for problems you may have missed.
1. Do WeBWorkDay 24, Problem 1 and hand in the work. Triangle. The double angle formula may help (see Yellow Packet, page 4). Or see #5 at the bottom of page 6 on the Triangle Handout.
2. Do WeBWork Day 24, Problem 2 and hand in the work.
3. Do WeBWork Day 24, Problem 3 and hand in the work.
4. Page 537 #44. Same hint as in #1.
5. Page 537 #36. Hint: Use a triangle. One side is  $\sqrt{1+x^2}$ . Remember to square this when replacing the denominator. Then use a reduction formula to do the integration. Remember to convert back.
6.  $\int \frac{6x-20}{x^2-5x} dx$ . This is a WeBWork Day 24 problem.
7.  $\int \frac{7x-18}{x^2-5x+6} dx$ . This is a WeBWork Day 24 problem.