Part I (due at the beginning of class Tuesday, December 9)

Try problems 13, 14, 18, and 19 on the integrals handout.

Part II: Problems (due at the beginning of class Tuesday, December 9)

1. Suppose that the growth rate in ounces per week of a baby is given by $w'(t)$. Explain in words what $\int_5^{10} w'(t)\,dt$ represents.
2. A vegetable nursery sells bell pepper plants after 6 weeks of growth and pruning. During those 6 weeks, the growth rate is given by $h'(t) = \frac{3}{2}t + 5$, where t is the time in weeks and h is the height of the plant in millimeters. When the plants are originally planted (at time $t = 0$), they are 12 mm tall.
   (a) Find the height of a pepper plant after t weeks.
   (b) How tall are the pepper plants when they are sold?
3. For each definite integral below, sketch the graph and use geometry to compute your answer.
   (a) $\int_{-3}^{4} \frac{x}{2}\,dx$
   (b) $\int_{-6}^{0} \sqrt{36 - x^2}\,dx$

Self Evaluation #3 (due at least 10 minutes before your appointment for your self evaluation during finals week)

Think about your learning and growth in this course and write about it in response to these questions plus anything else you want to share:

- How have you grown in your mathematical thinking this semester?
- In what, if any, ways have you changed your practices as a student toward learning mathematics?
- In what, if any, ways has your understanding of what mathematics is changed this semester?
- What things in calculus do you think you deepened your understanding of this semester? What contributed to that deeper understanding?
- What things in calculus do you wish we had spent more time on this semester?