Economics 314 **Spring 2011**
Project #10 Assignment **Due: 9am, Wednesday, May 4**

Partner assignments

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Problems

- **Romer's Problem 8.5.** Your answer to each part should include a phase diagram, a verbal description of what is happening, and time paths for q and the capital stock.

- **Romer's Problem 8.6.** It might be helpful in this problem to think of q as the market value of installed capital. Regarding Romer's hint: If ownership of an asset carried the obligation to make a one-time fixed tax payment on July 1, 2011, would the asset be worth the same on June 30 as on July 2?

- **Variant of Romer's Problem 9.1.**
  a. Suppose that $b = 1$ in Romer's equation (9.13). In this case, how does x relate to the expected earnings of someone who loses a job? Why does this make sense in equation (9.12)? Explain the logic of the paragraph following these equations in terms of this interpretation.
  b. Work part (a) of Problem 9.1.
  c. Determine (if possible) the signs of the effects of each parameter (β, b, f, and μ) on the unemployment rate and explain the intuition of these effects.
     i. How do the effects of the union parameters f and μ ($\partial u / \partial f$ and $\partial u / \partial \mu$) depend on the values of b and β?
     ii. Explain why a change in b might affect how sensitive equilibrium unemployment is to unionization.
     iii. Explain why a change in β might affect how sensitive equilibrium unemployment is to unionization.
  d. Suppose that (as in Romer's part (b-i)), $\beta = 0.06$ and $b = 1$.
     i. What would the unemployment rate be if there were no unions ($f = \mu = 0$)?
     ii. What would the unemployment rate be if, as Romer posits in part (b), $f = \mu = 0.15$?
  e. Suppose that (as in Romer's part (b-ii)), $\beta = 0.03$ and $b = 0.5$.
     i. What would the unemployment rate be if there were no unions ($f = \mu = 0$)?
     ii. What would the unemployment rate be if, as Romer posits in part (b), $f = \mu = 0.15$?

There's more: be sure to get page 2 …

f. Explain how the results of parts d and e illustrate the results of part c.

- **Romer's Problem 9.9.** Be sure to explain the intuition of your results.