

## Homework 6

Eco 10350, Prin of Macro, Kevin R Foster, Colin Powell School at CCNY

**Due 8am Friday March 29**

(I think of the deadline as being midnight somewhere on the planet after class, operationalized as 8am EST in NYC on day after)

Each student should submit a separate assignment, even if it is an identical computer file to the rest of your study group. When submitting assignments, please include your name and the assignment number as part of the filename. Please write the names of your study group members at the beginning of your homework.

1. What are the names of the people currently in your study group?
2. Choose the question(s) that you did worse on the midterm and answer it/them here, now that you aren't so stressed and can think more clearly.
3. In the OpenStax textbook, please answer B27 (in Appendix B), 11.50, 11.52, 11.56, 11.57, 12.17, 12.18.
4. What is the current location of the US on the Phillips curve?
5. Assume an economy can be modeled with these equations:

$$C = 100 + 0.9(Y - T)$$

$$T = 10 + 0.25Y$$

$$I = 250$$

$$G = 200$$

$$X = 300; M = 325$$

- a. What is equilibrium output?
  - i. First, substitute the equation for T into the equation for C and get an equation with C on the left and Y as the only variable on the right.
  - ii. Next use the national income identity to get an equation with all of the components.
  - iii. Solve for Y.
- b. Sketch the Keynesian cross diagram for this model.
- c. If potential output is 1600, what can you say about the level of unemployment?
- d. How much additional government spending could get the economy to potential?
- e. If Exports fall by 25, what is the impact on output?