

Problem Set #2

1a. Determine the values of L, Y, W and P from the following Neo-Classical Model (a variant of Model 1).

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| (1) | $L = 200 - 5*(W/P)$ | Labor Demand |
| (2) | $LS = 100 + 10*(W/P)$ | Labor Supply |
| (3) | $L = LS$ | Labor Market Equilibrium |
| (4) | $Y = 100*L^{.75}$ | Production Function |
| (5) | $4*M = P*AD$ | Quantity Theory of Aggregate Demand |
| (6) | $Y = AD$ | Goods Market Equilibrium |

Assume $M = 500$ (the only exogenous variable)

- b. What are the effects on the variables computed in a. if the stock of money is doubled?
2. In what ways are instability and unemployment explained by the Neo-Classical model? What policies would neo-classicists suggest to alleviate such problems?
- 3a. How would the labor market equilibrate in the Neo-Classical model? What forces can change the character of the stopping point in the labor market? How are these forces related to the level of output (in Model 1)?
 - b. What equilibrates the money market in the Neo-Classical model? How are money, credit, and goods markets related in Model 1?
4. Use Model 1 to answer the following questions.
 - a. Assume that raw materials and labor are substitutes. How does an increase in raw materials affect the price level, the employment level, the real wage and output?
 - b. How does a decline in investment expenditure affect the variables noted in a?
5. Consider the following information about behavior and technology in Classicstown.

A. Labor Demand	$L = 1000 - 5*(W/P)$
B. Labor Supply	$LS = 800 + 15*(W/P)$
C. Production	$Y = 500*L^{.5}*K^{.5}$
D. Consumption	$C = 200 + .8*Y$
E. Money Demand	$Md = 20*P*Y$

 - a. Add whatever equations are needed to complete this model of Classicstown; assume all markets are in competitive equilibrium.
 - b. Derive the aggregate supply curve.
 - c. Compute the equilibrium values for Y, W/P, L and I assuming $K=100$ and $M=20,000$.
6. Do problems 3 and 6 (on page 100) of Chapter 4 in Mankiw (8th edition).