1. (Textbook, 7th e, chapter 9, question 2)

Suppose the Fed reduces the money supply by 5 percent. Also assume the transactions velocity of money is constant.

a. What happens to the aggregate demand curve?
b. What happens to the level of output and the price level in the short run and in the long run?
c. According to Okun’s law, what happens to unemployment in the short run and in the long run?
d. What happens to the real interest rate in the short run and in the long run?

2. (Textbook, 7th e, chapter 10, question 2)

In the Keynesian cross, assume that the consumption function is given by

\[ C = 200 + 0.75(Y - T) \]

Planned investment is 100; government purchases and taxes are both 100.

a. Graph planned expenditure as a function of income.
b. What is the equilibrium level of income?
c. If government purchases increase to 125, what is the new equilibrium income?
d. What level of government purchases is needed to achieve an income of 1,600?

3. (Textbook, 7th e, chapter 10, question 3)

In many countries, including the U.S., taxes depend on income. Let’s represent the tax system by writing tax revenue as

\[ T = \bar{T} + tY, \]

where \( \bar{T} \) and \( t \) are parameters of the tax code. The parameter \( t \) is the marginal tax rate: if income rises by $1, taxes rise by $\( t \times 1 \).

a. How does this tax system change the way consumption responds to changes in GDP?
b. In the Keynesian cross, how does this tax system alter the government-purchases multiplier?