1) Consider the following IS/LM/FE model:

FE: \( Y^* = 10,000 \)

IS: \( Y = 14,000 - 500r \)

LM: \( r = 2 + 0.05Y - 0.823\left(\frac{M}{P}\right) \)

Where \( Y \) is real GDP in billions, \( r \) is the real interest rate as a percentage, \( P \) is the price level and \( M \) is the money supply in billions.

a) Assuming that the money supply is currently 600 billion, solve for the equilibrium interest rate and price level.

b) Suppose that the Federal Reserve increases the money supply by 10% to 660 billion. Solve for the short run impact on the interest rate and real GDP.

c) Calculate the long run impact on price:

2) Continuing with the same model, suppose that the government provides an incentive that raises corporate investment. As a result, at the initial interest rate, expenditures rise by 10%.

a) Calculate the short term effect on output and interest rates.

b) Calculate the long term effect on prices: