Problem 1. Expansionary monetary policy works through the following mechanism:

(a) fed funds rate $\downarrow$ $\implies$ other interest rates $\downarrow$ $\implies$ real interest rates $\downarrow$ $\implies$ quantity of loanable funds demanded $\uparrow$ $\implies$ demand for goods and services $\uparrow$ $\implies$ employment and GDP $\uparrow$

(b) fed funds rate $\downarrow$ $\implies$ other interest rates $\downarrow$ $\implies$ real interest rates $\downarrow$ $\implies$ quantity of loanable funds demanded $\downarrow$ $\implies$ demand for goods and services $\downarrow$ $\implies$ employment and GDP $\downarrow$

(c) fed funds rate $\uparrow$ $\implies$ other interest rates $\uparrow$ $\implies$ real interest rates $\uparrow$ $\implies$ quantity of loanable funds demanded $\downarrow$ $\implies$ demand for goods and services $\downarrow$ $\implies$ employment and GDP $\downarrow$

(d) fed funds rate $\uparrow$ $\implies$ other interest rates $\uparrow$ $\implies$ real interest rates $\uparrow$ $\implies$ quantity of loanable funds demanded $\uparrow$ $\implies$ demand for goods and services $\uparrow$ $\implies$ employment and GDP $\uparrow$

Problem 2.   The Federal Reserve has four tools it can use to affect interest rates in the economy. They are:

(a) the required reserve ratio

(b) open market operations

(c) the discount rate

(d) interest on reserves

(e) all of the above

(f) none of the above

Problem 3.   What is the *effective lower bound* and why does it warrant the use of *quantitative easing*?

Problem 4. The table below shows production and expenditure data for three countries.

	Country 1	Country 2	Country 3
C	12	10	16
I	4	8	6
G	10	12	7
EX	6	5	3
IM	2	4	6
Y	30	35	25

In Country 2,

(a) the goods market is in equilibrium

(b) there is excess demand for goods and services

(c) there is excess supply of goods and services

(d) there is an unplanned decrease in inventories

(e) none of the above

Problem 5. Which of the following is one explanation for downward-sloping AD?

(a) $P \downarrow \implies$ Real Wealth $\uparrow \implies C \uparrow \implies AD \uparrow \implies Y \uparrow$

(b) $P \downarrow \implies$ Real Wealth $\downarrow \implies C \uparrow \implies AD \uparrow \implies Y \uparrow$

(c) $P \downarrow \implies$ Real Wealth $\uparrow \implies C \downarrow \implies AD \uparrow \implies Y \uparrow$

(d) $P \uparrow \implies$ Real Wealth $\uparrow \implies C \uparrow \implies AD \uparrow \implies Y \uparrow$

Problem 6. Which of the following is one explanation for downward-sloping AD?

(a) $P \downarrow \implies (EX - IM) \downarrow \implies AD \uparrow \implies Y \uparrow$

(b) $P \uparrow \implies (EX - IM) \uparrow \implies AD \uparrow \implies Y \uparrow$

(c) $P \downarrow \implies (EX - IM) \uparrow \implies AD \uparrow \implies Y \uparrow$

(d) $P \uparrow \implies (EX - IM) \downarrow \implies AD \uparrow \implies Y \uparrow$

Problem 7. Which of the following is one explanation for downward-sloping AD?

(a) $P \downarrow \implies$ Money Demand $\uparrow \implies R \uparrow \implies r^e \uparrow \implies C + I \uparrow \implies AD \uparrow \implies Y \uparrow$

(b) $P \downarrow \implies$ Money Demand $\downarrow \implies R \downarrow \implies r^e \downarrow \implies C + I \uparrow \implies AD \uparrow \implies Y \uparrow$

(c) $P \downarrow \implies$ Money Demand $\downarrow \implies R \uparrow \implies r^e \uparrow \implies C + I \uparrow \implies AD \uparrow \implies Y \uparrow$

(d) $P \uparrow \implies$ Money Demand $\uparrow \implies R \uparrow \implies r^e \uparrow \implies C + I \uparrow \implies AD \uparrow \implies Y \uparrow$

Problem 8. The graph below shows a linear consumption function for a country. What is the marginal propensity to consume (MPC), for this country? What is the marginal propensity to save (MPS)?
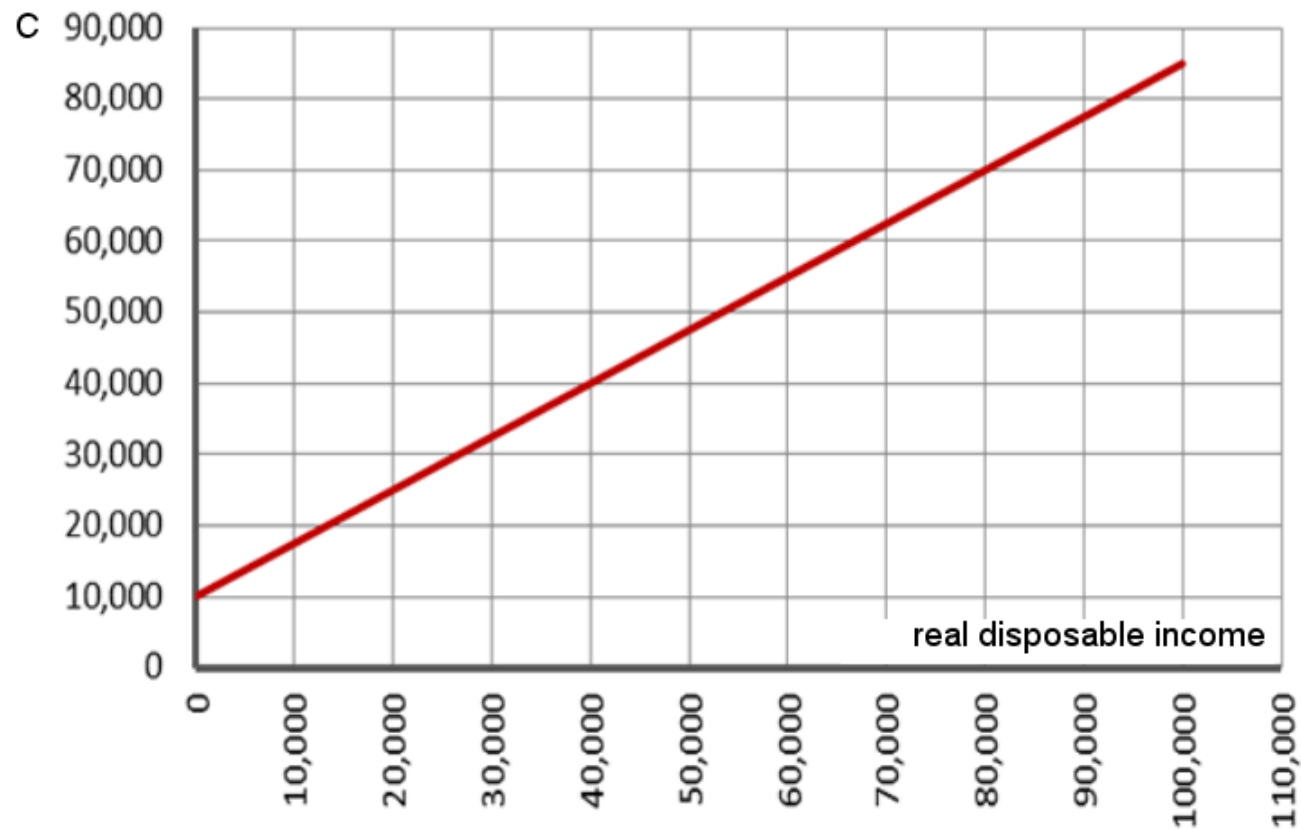
Problem 9. Suppose that MPC is 0.75. The government increases taxes by 10,000 units. What is the initial effect on disposable income and consumption?

Problem 10. Suppose government expenditures are increased by 100 units and the MPC is 0.75. Which of the following captures the expenditure multiplier process?

(a) $\Delta Y = 100 + 100 \times 0.75 + 100 \times 0.75^2 + 100 \times 0.75^3 + \ldots = 100 \times \frac{1}{1-0.75} = 400$

(b) $\Delta Y = 100$

(c) $\Delta Y = -100 - 100 \times 0.75 - 100 \times 0.75^2 - 100 \times 0.75^3 - \ldots = -100 \times \frac{1}{1-0.75} = 400$

(d) $\Delta Y = -100$

(e) none of the above