Problem 1. What is the definition of demand for money?

(a) The amount of money people are willing and able to hold

(b) The amount of money people are willing to hold

(c) The amount of money people are willing to borrow

(d) The amount of money people actually hold

Answer 1: a. In other words, demand for money is a fraction of a person's wealth that they want to hold as money.

Problem 2. What is the definition of supply of money?

(a) The amount of money that people are willing and able to lend out

(b) The amount of money printed by the government

(c) The amount of money held in reserve by banks

(d) The amount of money that the non-bank public actually hold

Answer 2: d. The supply of money is the total amount of currency and bank deposits that people and firms hold at a point in time.

Problem 3. Keynes argued that

(a) The classical economists had neglected the function of money as a medium of exchange

(b) Classical economists had neglected the function of money as a unit of account

(c) The classical economists neglected the function of money as a store of value.

Answer 3: c. Classical theory of demand for money said people only demand money because it functions as a medium of exchange. Keynes disagreed. This leads to the **liquidity preference theory**. The benefit from holding money is that it's liquid. The benefit from holding bonds is that they give a return based on their interest rate. Liquidity preference theory says that people try to balance the convenience of the liquidity of money with the interest income from bonds.

In this chapter, we are usually referring to the nominal interest rate R! Unless explicitly stated otherwise.

Problem 4. Which of the following statements is correct? If, all else the same,

(a) the price level increases by 5%, then demand for money will increase by 5%.

(b) real GDP increases by 5%, then the demand for money will increase by 5%.

(c) nominal GDP increases by 5%, then demand for money will increase by 5%.

(d) Any of the above is a correct answer.

(e) None of the above.

Answer 4: d.

- If the price level is higher, then people have to hold more money in order to buy the things they need to buy. There will be a proportional increase in money demand.
- If real GDP increases by 5%, then people have more (real) income, and thus will want to hold more money. Therefore the demand for money will increase—we assume this increase will also be proportional.
- Nominal GDP is $P \times Y$. If $NGDP$ increases by 5%, then it must be the sum of the changes in P and $RGDP$ have increased by 5%. From the above two answer, this means that money demand will also increase by 5%.

Problem 5. According to Keynes, what will happen if the interest rate increases, all else the same?

(a) Demands for both money and bonds will decrease

(b) Demands for money will increase but demand for bonds will decrease

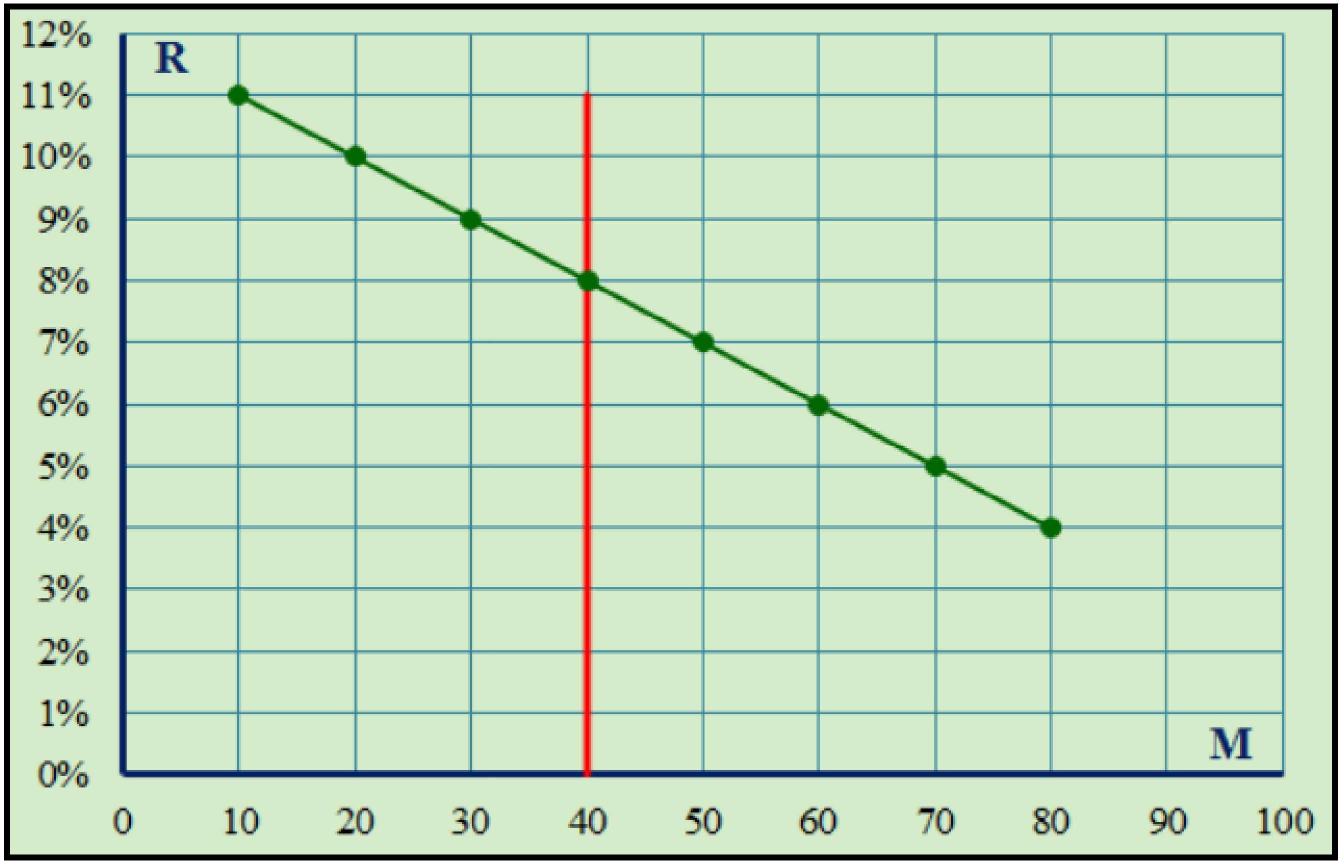
(c) Demands for both money and bonds will increase

(d) Demand for money will decrease but demand for bonds will increase

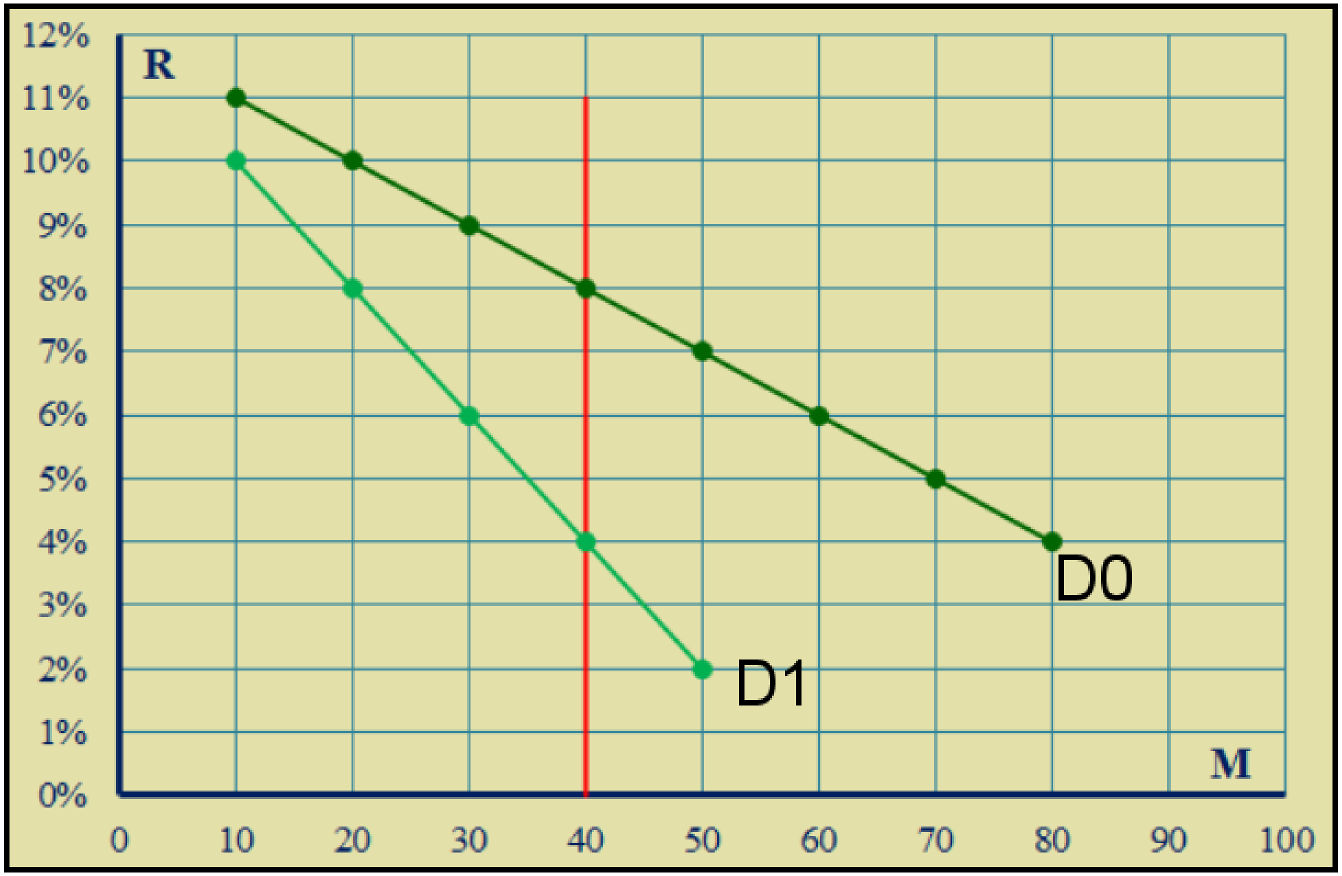
(e) None of the above

Answer 5: d. A higher interest rate means that bonds have a high return. This makes it more difficult to justify holding onto money, since the bonds have a high return and money has no return. Thus, less demand for money and more demand for bonds. Hence, downward sloping money demand curve.

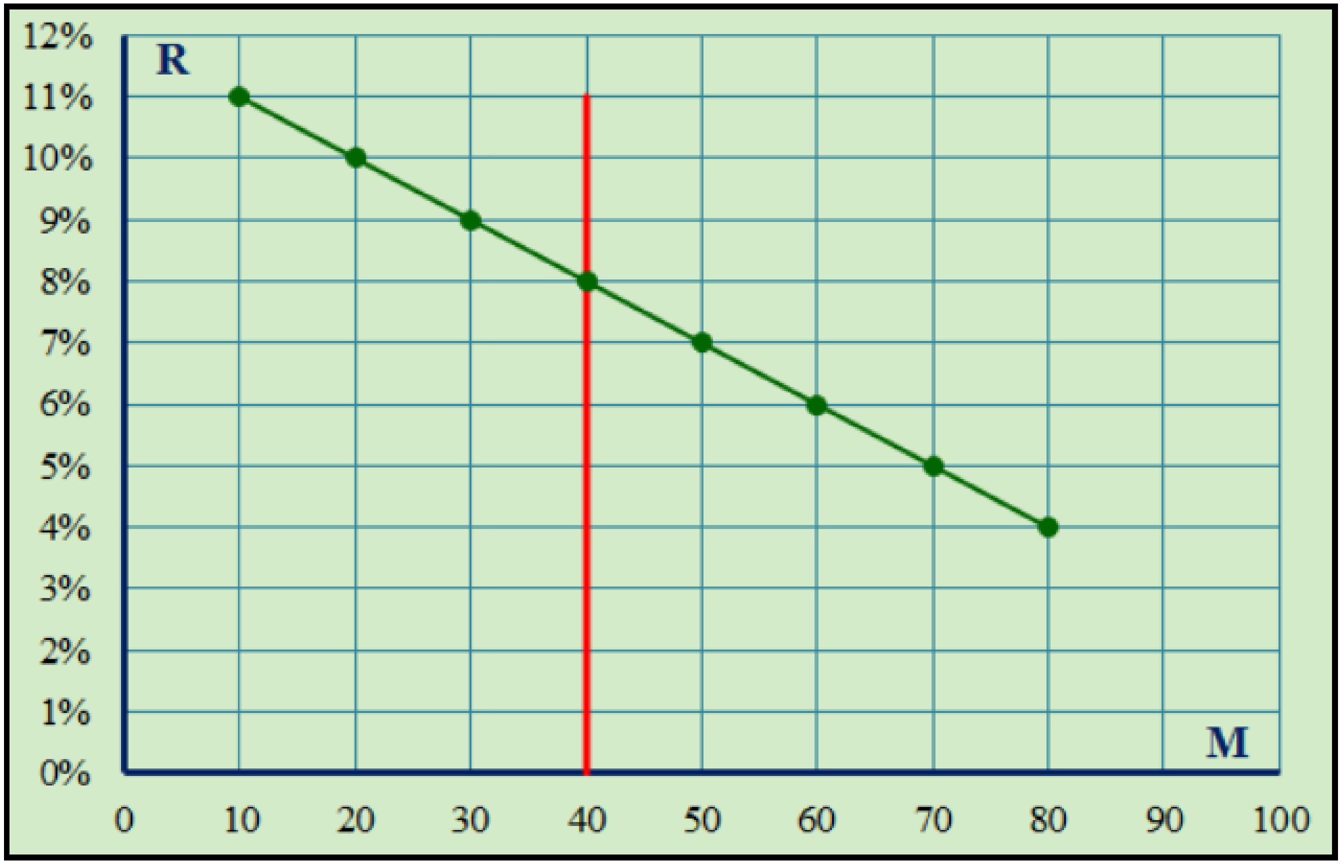
Problem 6. Consider the money market graph below. If the level of prices or real GDP fall by 50% (but not both simultaneously), then find the new equilibrium real interest rate.



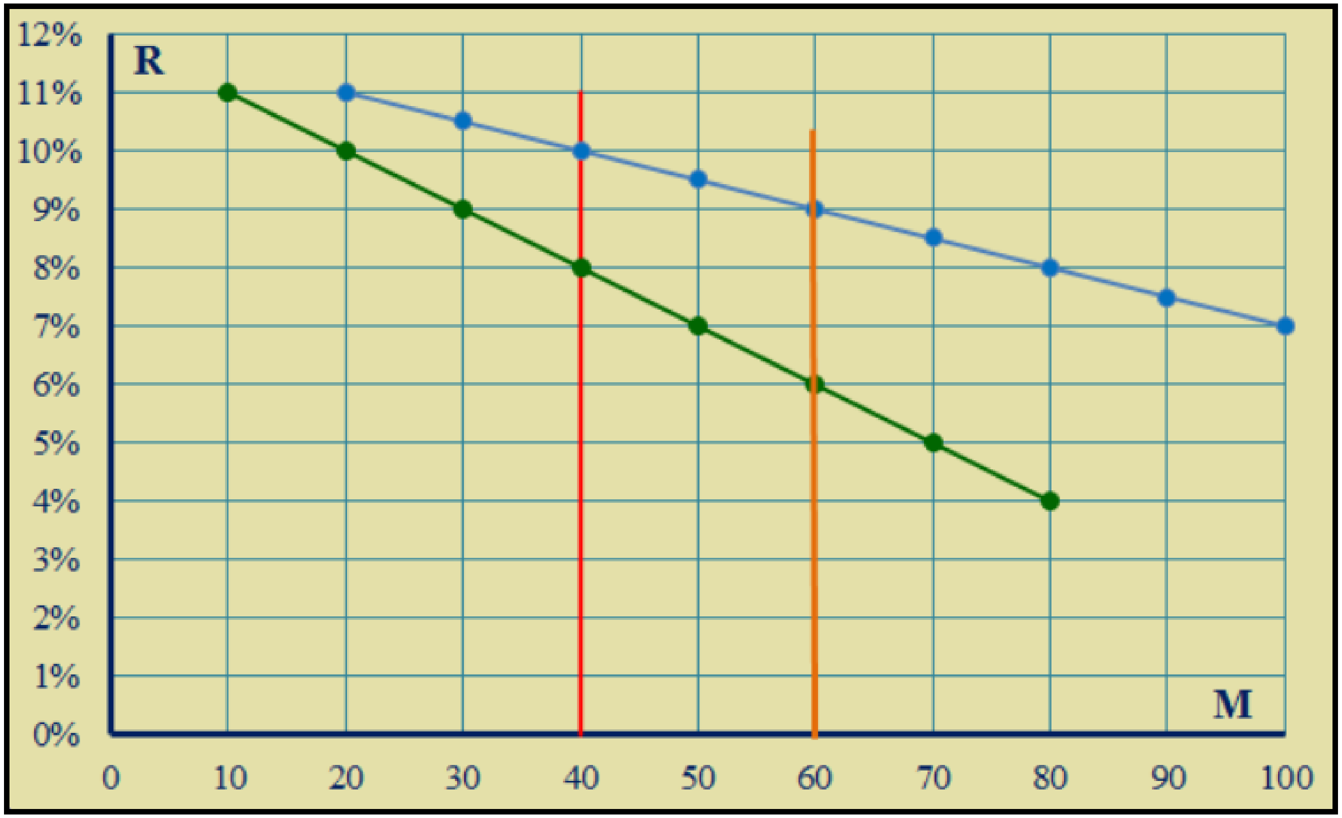
Answer 6. For every interest rate, cut the money demanded in half. So 4%.



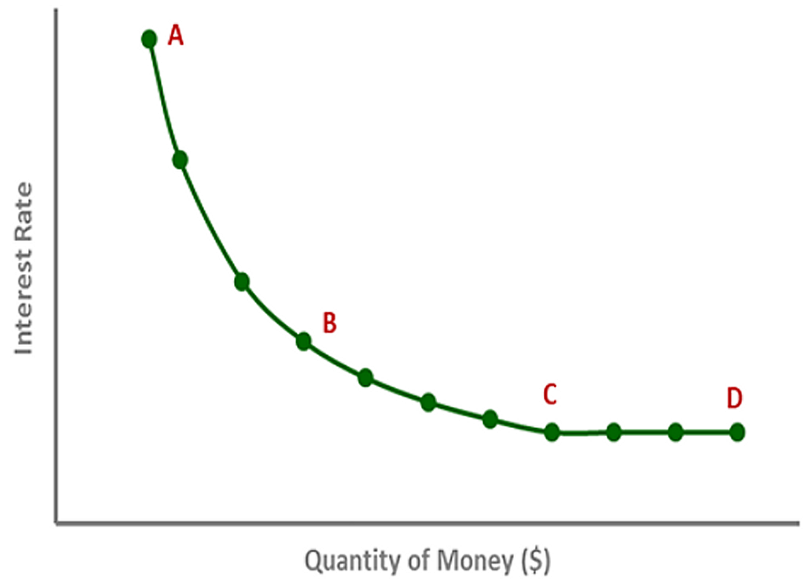
Problem 7. Consider the money market graph below. If the Fed increases the supply of money by 50% through an open market purchase, and at the same time the nominal GDP increases by 100%, then what's the new equilibrium interest rate?



Answer 7. The money supply will increase to 60. Money holding at every interest rate will double. So 9%.



Problem 8. Consider the demand-for-money function below.



Which segment is called "liquidity trap"?

(a) AB

(b) BC

(c) CD

(d) AC

Answer 8: c. If the money supply is at C but is increased to D, then there will be practically no change in the equilibrium interest rate. This is what is meant by a liquidity trap.