Problem 1. Match things.

(a) store of value

(b) fiat money

(c) medium of exchange

(d) unit of account

(e) commodity money

(i) the function of money that refers to money's usefulness as an asset

(ii) type of money that has no intrinsic value, but is still used as a means of payment

(iii) function of money that allows the avoidance of the double coincidence of wants problem associated with the barter system, i.e. facilitates transactions

(iv) function of money that allows prices to be easily expressed according to a standard measure

(v) type of money that has other uses besides serving as money, and thus has intrinsic value

Problem 2. Given the following components of the money supply, find M1 and M2.

currency	3
travelers' checks	1
demand deposits	6
savings deposits	10
small denomination time deposits	30
individual money market mutual funds	50

Problem 3. Abigail withdraws \$100 from her savings account and deposits it in her checking account. As a result

(a) M1 remains unchanged, M2 decreases

(b) M1 remains unchanged, M2 increases

(c) M1 decreases, M2 remains unchanged

(d) M1 decreases, M2 decreases

(e) None of the above

Problem 4. Match even more! Do it!

(a) discount loan

(b) discount rate

(c) required reserve ratio

(d) open market operations

(i) money banks borrow from the Fed

(ii) the rate of interest charged on loans made by the Fed discount rate

(iii) a fraction of deposits banks are required not to loan out required reserve ratio

(iv) the Fed's purchases and sales of government bonds

Problem 5. Match match match match? Match match match match.

(a) balance sheet

(b) required reserves

(c) excess reserves

(d) fully loaned out

(i) statement of assets, liabilities, and net worth

(ii) minimum amount of cash that banks must hold at all times

(iii) the amount of cash that banks might hold in excess of what is required by the Fed

(iv) banks are said to be this when they have no excess reserves

Problem 6. The required reserve ratio is 10%. Assume that the bank is fully loaned out. What is the bank's net worth?

Assets		Liabilities and Net Worth	
Reserves	?	Deposits	300,000,000
Treasury Bonds	5,000,000	Borrowing	15,000,000
Loans	350,000,000	Net Worth	?

Problem 7. Consider the initial balance sheet below. Subsequently the bank sells \$6 million worth of treasury bonds to the Fed. Update the balance sheet accordingly.

Assets Uses of Funds		**Liabilities + Net Worth** Sources of Funds	
Reserves		Deposits	\$140,000,000
Required	\$14,000,000		
Excess	\$13,000,000		
Treasury Bonds	\$37,000,000	Borrowing	\$18,000,000
Loans	\$136,000,000	Net Worth	\$42,000,000
Total	**\$200,000,000**	**Total**	**\$200,000,000**

Problem 8. Suppose the Fed purchases \$100 worth of Treasury bonds. The banking system is fully lent out and will continue to lend out all of its excess reserves. Suppose also that the required reserve ratio is 10%. How much deposits will be created in the banking system?

Problem 9. Which of the following is considered an expansionary monetary policy?

(a) an increase in the required reserve ratio

(b) an increase in the discount rate

(c) an open market sale

(d) an open market purchase

Problem 10. The required reserve ratio is 10% and banks want to hold some additional excess reserves. The Fed conducts an open market purchase worth \$1 million. Which is the following statements is true?

(a) the money supply will increase by less than \$10 million

(b) the money supply will increase by exactly \$10 million

(c) the money supply will increase by more than \$10 million

(d) the money supply will decrease by \$10 million