Name: _____ Date: _____

Monetary Policy - PRACTICE

1. Reserves must be deposited in the Federal Reserve Banks by:
   A) only commercial banks which are members of the Federal Reserve System.
   B) all depository institutions, that is, all commercial banks and thrift institutions.
   C) state chartered commercial banks only.
   D) federally chartered commercial banks only.

2. The commercial banking system borrows from the Federal Reserve Banks. As a result, the checkable deposits:
   A) of commercial banks are unchanged, but their reserves increase.
   B) and reserves of commercial banks both decrease.
   C) of commercial banks are unchanged, but their reserves decrease.
   D) and reserves of commercial banks are both unchanged.

3. The securities held as assets by the Federal Reserve Banks consist mainly of:
   A) corporate bonds.
   B) Treasury bills and Treasury bonds.
   C) common stock.
   D) certificates of deposit.

4. Which of the following will *increase* commercial bank reserves? - more $ put in circulation which increases deposits + potentially reserves
   A) the purchase of government bonds in the open market by the Federal Reserve Banks
   B) a decrease in the reserve ratio
   C) an increase in the discount rate
   D) the sale of government bonds in the open market by the Federal Reserve Banks

5. The three main tools of monetary policy are: in notes
   A) tax rate changes, the discount rate, and open-market operations.
   B) tax rate changes, changes in government expenditures, and open-market operations.
   C) the discount rate, the reserve ratio, and open-market operations.
   D) changes in government expenditures, the reserve ratio, and the discount rate.

6. Assume the reserve ratio is 25 percent and Federal Reserve Banks buy $4 million of U.S. securities from the public, which deposits this amount into checking accounts. As a result of these transactions, the supply of money is:
   A) not directly affected, but the money-creating potential of the commercial banking system is increased by $12 million.
   B) directly increased by $4 million and the money-creating potential of the commercial banking system is increased by $16 million.
   C) directly reduced by $4 million and the money-creating potential of the commercial banking system is decreased by $12 million.
   D) directly increased by $4 million and the money-creating potential of the commercial banking system is increased by $12 million.

4 x (1/0.25 - 1) = 12 mill.
initial deposit x (1/rr - 1) = money created

7. If the Federal Reserve System buys government securities from commercial banks and the public:
   A) commercial bank reserves will decline.
   B) commercial bank reserves will be unaffected.
   C) it will be easier to obtain loans at commercial banks.
   D) the money supply will contract.

because there is more money in money supply

8. Assume the legal reserve ratio is 25 percent and the Fourth National Bank borrows $10,000 from the Federal Reserve Bank in its district. As a result:
   A) commercial bank reserves are increased by $10,000.
   B) the supply of money automatically declines by $7,500.
   C) commercial bank reserves are increased by $7,500.
   D) the supply of money is automatically increased by $10,000.

monies borrowed by banks increase their reserves independent of reserve ratio.

9. Open-market operations refer to:
   A) purchases of stocks in the New York Stock Exchange.
   B) the purchase or sale of government securities by the Fed. in Newyork.
   C) central bank lending to commercial banks.
   D) the specifying of loan maximums on stock purchases.

10. Assume that a single commercial bank has no excess reserves and that the reserve ratio is 20 percent. If this bank sells a bond for $1,000 to a Federal Reserve Bank, it can expand its loans by a maximum of:
   A) $1,000.
   B) $2,000.
   C) $800.
   D) $5,000.

the reserve ratio is based off its liabilities of deposited funds so sale of bond creates excess reserves for total sale price

Use the following to answer questions 11-14:

CONSOLIDATED BALANCE SHEET: COMMERCIAL BANKING SYSTEM

Assets		Liabilities and net worth	
Reserves	$ 72	Checkable deposits	$240
Securities	110	Loans from Federal Reserve Banks	2
Loans	60		

.25 rr

?

CONSOLIDATED BALANCE SHEET: FEDERAL RESERVE BANKS

Assets		Liabilities and net worth	
Securities	$240	Reserves of commercial Banks	$72
Loans to commercial banks	2	Treasury deposits	30
		Federal Reserve Notes	140

11. Refer to the above balance sheets. The commercial banks have excess reserves of:
    A) $12.
    B) $22.
    C) $16.
    D) $24.

12. Refer to the above balance sheets. The maximum money-creating potential of the commercial banking system is:
    A) $36.
    B) $17.
    C) $48.
    D) $24.

can loan out excess of 12 plus the multiplier
12 (1/rr - 1)
12 (1/.25-1)
12 + 36 = 48

13. Refer to the above balance sheets. Suppose the Federal Reserve Banks buy $2 in securities from the public, which deposits this amount into checking accounts. As a result of these transactions, the supply of money will:
    A) be unaffected but the money-creating potential of the commercial banking system will increase by $6.
    B) directly decrease by $2 and the money-creating potential of the commercial banking system will be unaffected.
    C) directly increase by $8 and the money-creating potential of the commercial banking system will increase by $32.
    D) directly increase by $2 and the money-creating potential of the commercial banking system will increase by $6.

see equation for # 12

14. Refer to the above balance sheets. Suppose the Federal Reserve Banks sell $2 in securities directly to the commercial banks. As a result of this transaction the supply of money:
    A) will decrease by $2, but the money-creating potential of the commercial banking system will not be affected.
    B) is not directly affected, but the money-creating potential of the commercial banking system will decrease by $8. the bank will use $2m from reserves bringing excess reserves down to $10m - which lowers max $ creating potential to $40
    C) will directly increase by $2 and the money-creating potential of the commercial banking system will decrease by $8.
    D) will directly increase by $2 and the money-creating potential of the commercial banking system will increase by $8.

15. Assuming no currency drains, when the Federal Reserve Banks purchase government securities the reserves of commercial banks are:
    A) decreased by a multiple of the amount of the purchase.
    B) decreased by the amount of the purchase.
    C) increased by a multiple of the amount of the purchase.
    D) increased by the amount of the purchase.

16. Which of the following is *correct*? When the Federal Reserve buys government securities from the public, the money supply:
    A) contracts and commercial bank reserves increase.
    B) expands and commercial bank reserves decrease.
    C) contracts and commercial bank reserves decrease.
    D) expands and commercial bank reserves increase.

Use the following to answer questions 17-18:

Answer the next question(s) on the assumption that the legal reserve ratio is 20 percent. Suppose that the Fed sells $500 of government securities to commercial banks and buys $500 of securities from individuals, who deposit the cash in checking accounts.

17. As a result of the above transactions, reserves in the banking system will:
    A) remain unchanged. the purchase of securities is offset by the influx of checkable deposits
    B) rise by $100.
    C) fall by $100.
    D) rise by $1000.

18. As a result of the above transactions, the supply of money in the economy will:
A) remain unchanged.
B) rise by $500.
C) fall by $100.
D) fall by $500.

Bank's max. money creation potential remains same because reserves are uncharged.

Use the following to answer questions 19-23:

Answer the next question(s) on the basis of the following consolidated balance sheet of the commercial banking system. Assume that the reserve requirement is 10 percent. All figures are in billions and each question should be answered independently of changes specified in the preceding ones.

Assets		Liabilities and net worth	
Reserves	$ 60	Checkable deposits	$600
Securities	140	Capital stock	260
Loans	260		
Property	400		

19. Refer to the above data. The monetary multiplier for the commercial banking system is:
A) 5.
B) 10.
C) 12.5.
D) 20.

$\frac{600}{60} = 10\%$ stated in scenario above

$\frac{1}{rr} = 10$ $\frac{1}{.10}$

20. Refer to the above data. Suppose the Fed sold $10 billion of U.S. securities to the banks. This would:
A) increase bank reserves to $70 billion, reduce bank-held securities to $130 billion, and increase the money supply (checkable deposits) by $100 billion.
B) increase bank reserves to $70 billion, reduce bank-held securities to $130 billion, and decrease the money supply (checkable deposits) by $100 billion.
C) reduce bank reserves to $50 billion, increase bank-held securities to $150 billion, and increase the money supply (checkable deposits) by $100 billion.
D) reduce bank reserves to $50 billion, increase bank-held securities to $150 billion, and decrease the money supply (checkable deposits) by $100 billion.

in sale by Fed - banks pay w/ reserves pulling $ out of $ supply by reducing reserves + ability to create money

MS* (1/0.1 - 1) x 10 = 90 + 10 from reserves

- reverse of #20

21. Refer to the above data. Suppose the Fed bought $20 billion of U.S. securities from the banks. This would:
    A) increase bank reserves to $80 billion, reduce bank-held securities to $120 billion, and increase the money supply (checkable deposits) by $200 billion.
    B) increase bank reserves to $80 billion, reduce bank-held securities to $120 billion, and decrease the money supply (checkable deposits) by $200 billion.
    C) reduce bank reserves to $40 billion, increase bank-held securities to $160 billion, and increase the money supply (checkable deposits) by $200 billion.
    D) reduce bank reserves to $40 billion, increase bank-held securities to $160 billion, and decrease the money supply (checkable deposits) by $200 billion.

22. Refer to the above data. Suppose the Fed wants to increase the money supply by $400 billion to drive down interest rates and stimulate the economy. To accomplish this it could:
    A) sell $20 billion of U.S. securities to the banks.
    B) buy $20 billion of U.S. securities from the banks.
    C) sell $40 billion of U.S. securities to the banks.
    D) buy $40 billion of U.S. securities from the banks.

buy = cash into reserves

23. Refer to the above data. Suppose the Fed wants to reduce the money supply by $400 billion to drive up interest rates and dampen inflation. To accomplish this it could:
    A) sell $20 billion of U.S. securities to the banks.
    B) buy $20 billion of U.S. securities from the banks.
    C) sell $40 billion of U.S. securities to the banks.
    D) buy $40 billion of U.S. securities from the banks.

sale = cash out of reserves

24. When the required reserve ratio is increased, the excess reserves of member banks are:
    A) reduced, but the multiple by which the commercial banking system can lend is unaffected.
    B) reduced and the multiple by which the commercial banking system can lend is increased.
    C) increased and the multiple by which the commercial banking system can lend is increased.
    D) reduced and the multiple by which the commercial banking system can lend is reduced.

banks are required to hold more reserves + multiplier is lowered as is velocity of money down. reduces loan capacity; less money is created

25. When the required reserve ratio is decreased, the excess reserves of member banks are:
A) reduced, but the multiple by which the commercial banking system can lend is unaffected.
B) reduced and the multiple by which the commercial banking system can lend is increased.
C) increased and the multiple by which the commercial banking system can lend is increased. more loan capacity, more money created.
D) increased and the multiple by which the commercial banking system can lend is reduced.

26. A decrease in the reserve ratio increases the:
A) amount of actual reserves in the banking system.
B) amount of excess reserves in the banking system.
C) number of government securities held by the Federal Reserve Banks.
D) ratio of coins to paper currency in the economy.

The multiplier effect describes how an economy an increase in one economic activity leads to a much greater increase in economic output

27. An increase in the reserve ratio:
A) increases the size of the spending income multiplier.
B) decreases the size of the spending income multiplier.
C) increases the size of the monetary multiplier.
D) decreases the size of the monetary multiplier.

28. The discount rate is the rate of interest at which:
A) Federal Reserve Banks lend to commercial banks.
B) savings and loan associations lend to some builders.
C) Federal Reserve Banks lend to large corporations.
D) commercial banks lend to large corporations.

in notes

29. Suppose that, for every 1-percentage point decline in the discount rate, commercial banks collectively borrow an additional $2 billion from Federal Reserve banks. Also assume that reserve ratio is 10 percent. If the Fed lowers the discount rate from 4.0 percent to 3.5 percent, bank reserves will:
A) increase by $1 billion and the money supply will increase by $5 billion.
B) decline by $1 billion and the money supply will decline by $10 billion.
C) increase by $1 billion and the money supply will increase by $10 billion.
D) increase by $10 billion and the money supply will increase by $100 billion.

using the multiplier of 10

$\frac{1}{rr}$

money multiplier is reciprocal of reserve ratio

the smaller the reserve ratio, the larger the increase to money supply cuz more of banks dep. gets loaned out.

Δ Money Supply = Δ Reserves x Money multiplier

30. Suppose that, for every 1-percentage point decline of the discount rate, commercial banks collectively borrow an additional $2 billion from Federal Reserve banks. Also assume that reserve ratio is 20 percent. If the Fed increases the discount rate from 4.0 percent to 4.25 percent, bank reserves will:

Banks will hold more money

decrease

A) increase by $.5 billion and the money supply will (increase) by $2.5 billion.
B) decline by $.5 billion and the money supply will decline by $2.5 billion.
C) increase by $.75 billion and the money supply will increase by $3.75 billion.
D) increase by $1 billion and the money supply will increase by $5 billion.

2 X 0.25 = .5 bill ↓

.5 x money multiplier =
.5 x 5 = 2.5

Use the following to answer questions 31-34:

Answer the next question(s) on the basis of the following consolidated balance sheet of the commercial banking system. Assume that the reserve requirement is 20 percent. All figures are in billions and each question should be answered independently of changes specified in all preceding ones.

Assets		Liabilities and net worth	
Reserves	$ 200	Checkable deposits	$1000
Securities	300	Capital stock	400
Loans	500		
Property	400		

$\frac{1}{.20} = 5$

$\frac{1}{.25} = 4$

$\frac{1}{.16} = 6.25$

31. Refer to the above data. If the Fed increased the reserve requirement from 20 percent to 25 percent, a deficiency of reserves in the commercial banking system of 50 would occur and the monetary multiplier would fall to 4.

A) $50 billion; 5.
B) $10 billion; 4
C) $50 billion; 4
D) $10 billion; 8

32. Refer to the above data. If the Fed reduced the reserve requirement from 20 percent to 16 percent, excess reserves in the commercial banking system would increase by 40 and the monetary multiplier would rise to ____.

A) $10 billion; 5
B) $40 billion; 6.25
C) $10 billion; 10
D) $40 billion; 12.5

$\frac{1}{.16} = 6.25$

Changes in the reserve ratio will change the multiplier effect, and that changes the money supply

33. Refer to the above data. Suppose the Fed wants to increase the money supply by $1000 billion to drive down interest rates and stimulate the economy. To accomplish this it could lower the reserve requirement from 20 percent to:
A) 10 percent.
B) 12 percent.
C) 14 percent.
D) 12 percent.

to increase money supply from existing reserve we would need to cut rr by half to 10% to free up half of the reserves

34. Refer to the above data. Suppose the Fed wants to reduce the money supply by $200 billion to drive up interest rates and dampen inflation. To accomplish this it could increase the reserve requirement from 20 percent to: pulls nominal GDP down
A) 22 percent.
B) 25 percent..
C) 30 percent.
D) 33 percent.

$\Delta MS = \Delta rr \times$ money multiplier
800 = 25%

35. Assuming government wishes to either increase or decrease the level of aggregate demand, which of the following pairs are *not* consistent policy measures?
A) a tax increase and an increase in the money supply
B) a tax reduction and an increase in the money supply
C) a reduction in government expenditures and a decline in the money supply
D) a tax increase and an increase in the interest rate

tax increase will reduce money supply

The change in reserve ratio changes the magnitude of the multiplier effect so that when the Fed actually changes the money supply using open-market operations, the result is a larger or smaller multiple of what they started with

@20% (the rr of 200 = 1000 (200 x 5)
800 (reduced by increase in rr by Fed)