

# MACROECONOMICS UNIT 4

## PRACTICE SHEET



**Part 1: Nominal and Real Interest Rates-** Complete the following. Show your work.

1. Assume the nominal interest rate is 7% and inflation is 3%. What is the real interest rate?
2. Assume the real interest rate is -2% and the inflation rate is 5%. What is the nominal interest rate?
3. Assume the real interest rate is 4% and the nominal interest rate is 7%. What is the expected rate of inflation?

**Part 2: Bank Balance Sheets-** Use the balance sheet to complete the following.

Assets		Liabilities	
Required reserves	\$2,000	Demand deposits	\$20,000
Excess reserves	\$0	Owner's equity	\$5,000
Customer loans	\$7,000		
Government securities (bonds)	?		

4. Calculate the total amount of government securities this bank owns.
5. Calculate the required reserve ratio.
6. Suppose that an individual deposits \$10,000 of cash into her checking account. What is the immediate effect of the cash deposit on the M1 measure of the money supply?
7. What is the dollar value of the bank's required reserves after the \$10,000 cash deposit?
8. What is the dollar value of the bank's excess reserves immediately after the \$10,000 cash deposit?
9. Calculate the maximum increase in the money supply as a result of the \$10,000 deposit. Show your work.
10. Assume instead that the government buys \$10,000 of securities. What is the immediate effect on the M1 measure of the money supply?
11. Calculate the maximum increase in the money supply when the government buys \$10,000 of securities.
12. Will the demand deposits initially increase, decrease, or stay the same when the government buys securities?

**Part 3: More Practice-** Below is the balance sheet for Clifford Bank. Identify the following immediately after Cindy withdraws \$2,000 of cash from the bank.

Assets		Liabilities	
Required reserves	\$1,000	Demand deposits	\$10,000
Excess reserves	\$2,000	Owner's equity	\$3,000
Customer loans	?		
Government bonds	\$8,000		

13. The reserve ratio
14. Customer loans
15. Demand deposits
16. Required reserves
17. Excess reserves

**Part 4: Even More Practice-** Below is the balance sheet for D&D Bank. Identify the change in the following immediately after David deposits \$5,000 of cash into the bank.

Assets		Liabilities	
Required reserves	\$1,000	Demand deposits	\$20,000
Excess reserves	\$0	Owner's equity	\$0
Customer loans	\$19,000		
Government bonds	\$0		

18. The reserve ratio
19. Demand deposits
20. Customer loans
21. Required reserves
22. Excess reserves

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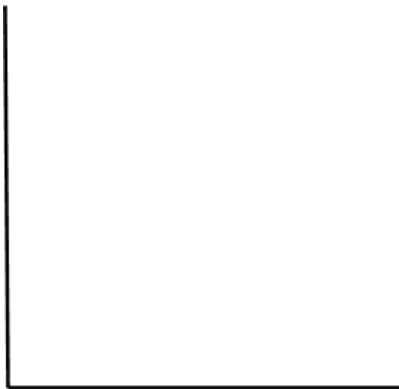
**Part 5: Policy Overview-** Identify if each of the following would increase (↑), decrease (↓), or not change (NC) to achieve each type of policy. Lastly, identify how each policy will affect AD or SRAS.

	Gov Spend. ↑ or ↓ or NC	Taxes ↑ or ↓ or NC	Reserve Req. ↑ or ↓ or NC	Discount Rate ↑ or ↓ or NC	Central Bank Buys or Sells Bonds	AD ↑ or ↓ or NC	SRAS ↑ or ↓ or NC
23. Contractionary Fiscal Policy							
24. Expansionary Monetary Policy							
25. Self-Adjustment (positive output gap)							
26. Contractionary Monetary Policy							
27. Self-Adjustment (negative output gap)							
28. Expansionary Fiscal Policy							

**Part 6: Monetary Policy-** Complete the following.

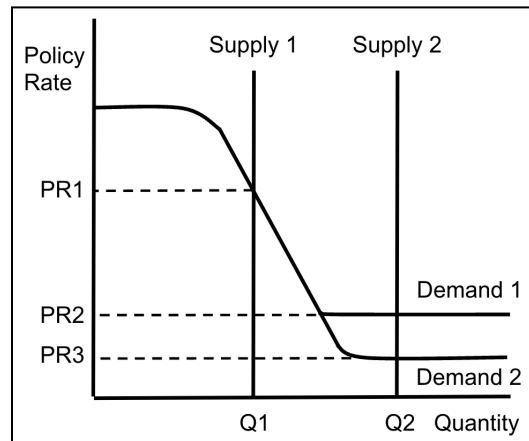
- Identify two ways monetary policy is different from fiscal policy.
- Explain how an increase in the money supply affects aggregate demand in the short run.

**Part 7: The Money Market-** Draw the money market graph and label the equilibrium nominal interest rate IR1.



- Draw the effect of contractionary monetary policy. Label the new equilibrium nominal interest rate IR2.
- What will happen to investment as a result of this change?

**Part 8: The Reserve Market-** Use the reserve market graph to complete the following.



- Would open market operations be more effective when reserves are at Q1 or when reserves are at Q2?
- Identify a specific policy that would cause Demand 1 to shift to Demand 2.

**Part 9: Loanable Funds-** Identify how each will affect the demand or supply of loanable funds and the real interest rate.

	Demand or Supply ↑ or ↓	Real Interest Rate ↑ or ↓
35. To decrease unemployment, the government deficit spends		
36. Political unrest causes foreigners to take money out of the economy		
37. Businesses expect lower sales and worse economic conditions		
38. In anticipation of longer life expectancy, people begin to save more		