

Problem Set 4.3

Name: _____

54. Suppose that all banks keep only the minimum reserves required by law and that there are no currency drains. The legal reserve requirement is 10 percent. If Maggie deposits the \$100 bill she received as a graduation gift from her grandmother into her checking account, the maximum increase in the total money supply will be
- (A) \$10
 - (B) \$100
 - (C) \$900
 - (D) \$1,000
 - (E) \$1,100
18. Which of the following sequences of events would occur if the Federal Reserve implemented contractionary monetary policy?
- (A) Interest rates increase, investment and consumption spending decrease, aggregate demand decreases, and output and prices decrease.
 - (B) Interest rates increase, investment and consumption spending decrease, aggregate demand increases, and output and prices decrease.
 - (C) Interest rates increase, investment and consumption spending increase, aggregate demand decreases, and output and prices decrease.
 - (D) Interest rates decrease, investment and consumption spending decrease, aggregate demand decreases, and output and prices decrease.
 - (E) Interest rates decrease, investment and consumption spending decrease, aggregate demand decreases, and output and prices increase.
13. Which Federal Reserve action can shift the aggregate demand curve to the left?
- (A) Lowering the federal funds rate
 - (B) Lowering income taxes
 - (C) Lowering reserve requirements
 - (D) Raising the discount rate
 - (E) Raising government spending on national defense
45. The Federal Reserve decreases the federal funds rate by
- (A) decreasing the reserve requirement
 - (B) decreasing the discount rate
 - (C) increasing the discount rate
 - (D) selling government bonds on the open market
 - (E) buying government bonds on the open market
12. Which of the following is most likely to occur if the Federal Reserve engages in open market operations to reduce inflation?
- (A) A decrease in interest rates
 - (B) A decrease in reserves in the banking system
 - (C) A decrease in the government deficit
 - (D) An increase in the money supply
 - (E) An increase in exports
16. Which of the following will lead to a decrease in a nation's money supply?
- (A) A decrease in income tax rates
 - (B) A decrease in the discount rate
 - (C) An open market purchase of government securities by the central bank
 - (D) An increase in reserve requirements
 - (E) An increase in government expenditures on goods and services

23. In the short run, an expansionary monetary policy would most likely result in which of the following changes in the price level and real gross domestic product (GDP) ?

<u>Price Level</u>	<u>Real GDP</u>
(A) Decrease	Increase
(B) No change	Decrease
(C) Increase	No change
(D) Increase	Decrease
(E) Increase	Increase

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(A) Decrease	Increase
(B) No change	Decrease
(C) Increase	No change
(D) Increase	Decrease
(E) Increase	Increase

46. Assume that the required reserve ratio is 10 percent, banks keep no excess reserves, and borrowers deposit all loans made by banks. Suppose you have saved \$100 in cash at home and decide to deposit it in your checking account. As a result of your deposit, the money supply can increase by a maximum of

- (A) \$800
- (B) \$900
- (C) \$1,000
- (D) \$1,100
- (E) \$1,200

57. For which of the following sets of unemployment and inflation rates will a central bank be most reluctant to increase the rate of growth in the money supply?

	<u>Unemployment Rate</u>	<u>Inflation Rate</u>
(A)	10%	2%
(B)	10%	5%
(C)	10%	10%
(D)	5%	5%
(E)	5%	10%

If the reserve requirement is 25 percent and banks hold no excess reserves, an open market sale of \$400,000 of government securities by the Federal Reserve will

- (A) increase the money supply by up to \$1.6 million
- (B) decrease the money supply by up to \$1.6 million
- (C) increase the money supply by up to \$300,000
- (D) increase the money supply by up to \$100,000
- (E) decrease the money supply by up to \$100,000

To counteract a recession, the Federal Reserve should

- (A) raise the reserve requirement and the discount rate
- (B) sell securities on the open market and raise the discount rate
- (C) sell securities on the open market and lower the discount rate
- (D) buy securities on the open market and raise the discount rate
- (E) buy securities on the open market and lower the discount rate

The purchase of bonds by the Federal Reserve will have the greatest effect on real gross domestic product if which of the following situations exists in the economy?

- (A) The required reserve ratio is high, and the interest rate has a large effect on investment spending.
- (B) The required reserve ratio is high, and the interest rate has a small effect on investment spending.
- (C) The required reserve ratio is low, and the interest rate has a large effect on investment spending.
- (D) The required reserve ratio is low, and the marginal propensity to consume is low.
- (E) The marginal propensity to consume is high, and the interest rate has a small effect on investment spending.

2009 Practice FRQ

- I. Assume that the United States economy is in long-run equilibrium with an expected inflation rate of 6 percent and an unemployment rate of 5 percent. The nominal interest rate is 8 percent.
 - (a) Using a correctly labeled graph with both the short-run and long-run Phillips curves and the relevant numbers from above, show the current long-run equilibrium as point A.
 - (b) Calculate the real interest rate in the long-run equilibrium.
 - (c) Assume now that the Federal Reserve decides to target an inflation rate of 3 percent. What open-market operation should the Federal Reserve undertake?
 - (d) Using a correctly labeled graph of the money market, show how the Federal Reserve's action you identified in part (c) will affect the nominal interest rate.
 - (e) How will the interest rate change you identified in part (d) affect aggregate demand in the short run? Explain.
 - (f) Assume that the Federal Reserve action is successful. What will happen to each of the following as the economy approaches a new long-run equilibrium?
 - (i) The short-run Phillips curve. Explain.

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Section II

Planning Time—10 minutes

Writing Time—50 minutes

Directions: You have fifty minutes to answer all three of the following questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes.

1. Assume that the United States economy is in a severe recession with no inflation.
 - (a) Using a correctly labeled aggregate demand and aggregate supply graph, show each of the following for the economy.
 - (i) Full-employment output
 - (ii) Current output level
 - (iii) Current price level
 - (b) The federal government announces a major decrease in spending. Using your graph in part (a), show how the decrease in spending will affect each of the following.
 - (i) Level of output
 - (ii) Price level
 - (c) Explain the mechanism by which the decrease in government spending will affect the unemployment rate.
 - (d) The Federal Reserve purchases bonds through its open-market operations.
 - (i) Using a correctly labeled graph, show the effect of this purchase on the interest rate.
 - (ii) Explain how the change in the interest rate will affect output and the price level.
 - (e) Explain how the change in the interest rate you identified in part (d) will affect each of the following.
 - (i) International value of the dollar relative to other currencies
 - (ii) United States exports
 - (iii) United States imports

2008 AP[®] MACROECONOMICS FREE-RESPONSE QUESTIONS

MACROECONOMICS

Section II

Planning Time—10 minutes

Writing Time—50 minutes

Directions: You have 50 minutes to answer all three of the following questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes. Use a pen with black or dark blue ink.

1. Assume the United States economy is operating at full-employment output and the government has a balanced budget. A drop in consumer confidence reduces consumption spending, causing the economy to enter into a recession.
 - (a) Using a correctly labeled graph of the short-run Phillips curve, show the effect of the decrease in consumption spending. Label the initial position “A” and the new position “B”.
 - (b) What is the impact of the recession on the federal budget? Explain.
 - (c) Assume that current real gross domestic product falls short of full-employment output by \$500 billion and the marginal propensity to consume is 0.8.
 - (i) Calculate the minimum increase in government spending that could bring about full employment.
 - (ii) Assume that instead of increasing government spending, the government decides to reduce personal income taxes. Will the reduction in personal income taxes required to achieve full employment be larger than or smaller than the government spending change you calculated in part (c)(i) ? Explain why.
 - (d) Using a correctly labeled graph of the loanable funds market, show the impact of the increased government spending on the real interest rate in the economy.
 - (e) How will the real interest rate change in part (d) affect the growth rate of the United States economy? Explain.

2. Balance of payments accounts record all of a country’s international transactions during a year.
 - (a) Two major subaccounts in the balance of payments accounts are the current account and the capital account. In which of these subaccounts will each of the following transactions be recorded?
 - (i) A United States resident buys chocolate from Belgium.
 - (ii) A United States manufacturer buys computer equipment from Japan.
 - (b) How would an increase in the real income in the United States affect the United States current account balance? Explain.
 - (c) Using a correctly labeled graph of the foreign exchange market for the United States dollar, show how an increase in United States firms’ direct investment in India will affect the value of the United States dollar relative to the Indian currency (the rupee).