

**NAME** \_\_\_\_\_

**Cooleconomics.com**  
**Principles of Macroeconomics**

**Final Exam**

You have a maximum of 150 minutes to complete this 200-point exam.

This is a closed-book, closed-notes exam. A 1-sided 8.5 x 11" notes sheet may be used. A calculator whose memory and programming are cleared may also be used

Calculations must be shown to receive any credit on questions that require calculations.

For questions that require explanations, your score depends entirely upon your explanation. Please demonstrate knowledge obtained in this class as precisely as possible.

Graphs must be fully labeled (each axis, point, and curve) to receive any credit.

**1. (60 points)** The United States has had persistently high trade deficits for many years. Answer (a)-(f) below in the context of an AD/AS/LRAS model (#5).

a) Name a change in United States government policy that will reduce the U.S. trade deficit for many years. Clearly explain why your policy change will reduce the trade deficit for a long time. Employ at least 1 equation in your explanation.

b) Carefully and fully explain how your policy change may affect the value of the U.S. dollar relative to foreign currency—will the dollar *appreciate*, *depreciate*, or be *unaffected*?

c) Carefully and fully explain how your policy change will affect the amount of lending that foreigners do to the United States.

d) Clearly and fully explain how your policy change will affect the U.S. long run budget surplus. Employ at least 1 equation in your explanation.

e) Clearly and fully explain how your policy change will affect U.S. consumption in the *short run*. Employ at least 1 equation in your explanation.

f) Use 1 or more graphs to illustrate the *short run and long run* effects of your policy change on the U.S. economy, assuming no government interference in the transition phase of the business cycle. (Fully label your graph(s); no numbers are required.)

**2. (40 points)** In a fake economy only 2 final goods are produced—cars and boats. In 1998 10 cars were produced, priced at \$100 each. In 1999 30 cars were produced at \$50 each. In 1998 30 boats were produced at \$20 each. In 1999 35 boats were produced at \$40 each. The base year in this economy is 1998.

Calculate:

1998 real GDP \_\_\_\_\_

1999 real GDP \_\_\_\_\_

1999 nominal GDP \_\_\_\_\_

Growth rate of total production, 1998-1999 \_\_\_\_\_

Percentage change in the average price level, 1998-1999 \_\_\_\_\_

**3. (10 points)** The President of the country of Xerk worries that future generations of Xerkians will not be much better off materially than the current generation of Xerkians. What policy can the President propose now that, if implemented, may help future generations of Xerkians? Will the present generation of Xerkians go along? Fully and clearly explain using information consistent with model #5.

**4. (10 points)** Next year the Fed may reduce the discount rate. Explain, in the context of the AD/AS model how this action will affect the U.S. budget surplus in the short run.

**5. (10 points)** In a fake world there are only 2 countries—X and Y—and 2 goods—chips and soda. Country X is 10 times better at chip production than country Y. Country X is 20 times better at soda production than country Y.

**Can the two countries benefit from trade?** Clearly explain why or why not. (Explain the pattern of trade (exports and imports), if trade allows the countries to benefit.)

**6. (10 points)** Calculate GDP and national income using some of the data below.

Net exports	-200
depreciation	100
disposable personal income	1500
government purchases	500
gross private domestic investment	400
(net) indirect business taxes	300
personal consumption expenditures	1400
transfer payments	30
net factor payments to rest of world	50

GDP \_\_\_\_\_

national income \_\_\_\_\_

**7. (60 points)** Next year, Congress and the President may permanently cut taxes and permanently increase government spending.

a) Use an AD/AS/LRAS model (#5) to graph the short run and long run effects of these actions, assuming that the government does NOT intervene in the transition phase of the business cycle.

Below, you will do forecasts using the AD/AS/LRAS model (#5), explaining whether each variable will be *higher*, *lower*, or *at the same level* relative to its value in the initial equilibrium (before the policy change)

b) Write your short run and long run forecasts for personal savings. Explain each forecast.

short run \_\_\_\_\_ long run \_\_\_\_\_

c) Write your short run and long run forecasts for the trade deficit. Explain each forecast.

short run \_\_\_\_\_ long run \_\_\_\_\_

d) Write your short run and long run forecasts for unemployment. Explain each forecast.

short run \_\_\_\_\_ long run \_\_\_\_\_

e) Write your short run and long run forecasts for investment. Explain each forecast.

short run \_\_\_\_\_ long run \_\_\_\_\_

f) Write your short run and long run forecasts for the budget surplus. Explain each forecast.

short run \_\_\_\_\_ long run \_\_\_\_\_