

# **AP® Macroeconomics 2003 Free-Response Questions**

The materials included in these files are intended for use by AP teachers for course and exam preparation; permission for any other use must be sought from the Advanced Placement Program<sup>®</sup>. Teachers may reproduce them, in whole or in part, in limited quantities for noncommercial, face-to-face teaching purposes. This permission does not apply to any third-party copyrights contained herein. This material may not be mass distributed, electronically or otherwise. These materials and any copies made of them may not be resold, and the copyright notices must be retained as they appear here.

These materials were produced by Educational Testing Service® (ETS®), which develops and administers the examinations of the Advanced Placement Program for the College Board. The College Board and Educational Testing Service (ETS) are dedicated to the principle of equal opportunity, and their programs, services, and employment policies are guided by that principle.

The College Board is a national nonprofit membership association whose mission is to prepare, inspire, and connect students to college and opportunity. Founded in 1900, the association is composed of more than 4,300 schools, colleges, universities, and other educational organizations. Each year, the College Board serves over three million students and their parents, 22,000 high schools, and 3,500 colleges through major programs and services in college admissions, guidance, assessment, financial aid, enrollment, and teaching and learning. Among its best-known programs are the SAT®, the PSAT/NMSQT®, and the Advanced Placement Program® (AP®). The College Board is committed to the principles of equity and excellence, and that commitment is embodied in all of its programs, services, activities, and concerns.

For further information, visit www.collegeboard.com

Copyright © 2003 College Entrance Examination Board. All rights reserved. College Board, Advanced Placement Program, AP, AP Vertical Teams, APCD, Pacesetter, Pre-AP, SAT, Student Search Service, and the acom logo are registered trademarks of the College Entrance Examination Board. AP Central is a trademark owned by the College Entrance Examination Board. PSAT/NMSQT is a registered trademark jointly owned by the College Entrance Examination Board and the National Merit Scholarship Corporation. Educational Testing Service and ETS are registered trademarks of Educational Testing Service. Other products and services may be trademarks of their respective owners.

For the College Board's online home for AP professionals, visit AP Central at apcentral.collegeboard.com.

## 2003 AP® MACROECONOMICS FREE-RESPONSE QUESTIONS

### **MACROECONOMICS**

Section II

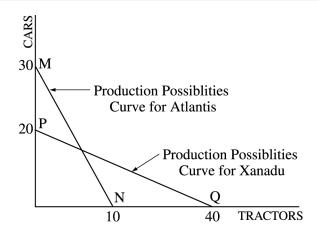
Planning Time—10 minutes
Writing Time—50 minutes

**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

## 2003 AP® MACROECONOMICS FREE-RESPONSE QUESTIONS

- 2. Country Y is experiencing severe and unanticipated inflation.
  - (a) Explain the effect of this inflation on each of the following.
    - (i) A family with savings in a fixed-interest-rate time deposit account
    - (ii) A business repaying a long-term, fixed-interest-rate loan
  - (b) Identify one fiscal policy action that could be implemented to reduce inflation.
  - (c) Identify an open-market operation that could be implemented to reduce inflation.
  - (d) Suppose that Country Y continues to experience high inflation in the long run. Indicate the effect of this inflation on the nominal interest rate in Country Y.
  - (e) If Country Y's inflation is high relative to that of other countries, explain the effect of this inflation on the international value of Country Y's currency.



- 3. Assume that two countries, Atlantis and Xanadu, have equal amounts of resources. Atlantis can produce 30 cars or 10 tractors or any combination, as shown by the line MN in the figure above. Xanadu can produce 20 cars or 40 tractors or any combination, as shown by the line PQ in the figure above.
  - (a) Which country has an absolute advantage in the production of tractors? Explain how you determined your answer.
  - (b) Which country has a comparative advantage in the production of cars? Using the concept of opportunity cost, explain how you determined your answer.
  - (c) If the two countries specialize and trade with each other, which country will import cars? Explain why.
  - (d) If the terms of trade are such that one car can be exchanged for one tractor, explain how Atlantis will benefit from such trade.

#### **END OF EXAMINATION**

Copyright © 2003 by College Entrance Examination Board. All rights reserved. Available to AP professionals at apcentral.collegeboard.com and to students and parents at www.collegeboard.com/apstudents.