



Student Performance Q&A: 2003 AP[®] Microeconomics Free-Response Questions

The following comments on the 2003 free-response questions for AP[®] Microeconomics were written by the Chief Reader, Clark Ross of Davidson College in Davidson, North Carolina. They give an overview of each free-response question and of how students performed on the question, including typical student errors. General comments regarding the skills and content that students frequently have the most problems with are included. Some suggestions for improving student performance in these areas are also provided. Teachers are encouraged to attend a College Board workshop, to learn strategies for improving student performance in specific areas.

Question 1

What was the intent of this question?

The intent of this question was to test students' understanding of the basic competitive model. Students needed to compare results in the market to those of an individual firm. Students were also tested on the long-run equilibrium in perfect competition. Finally, students were asked to incorporate a positive consumption externality into their analysis.

How well did students perform on this question?

The mean score for this question was 5.72 out of a possible 12 points. On average, students performed reasonably well, receiving about 50 percent of the maximum credit for this question.

What were common student errors or omissions?

A common error was failing to show the individual firm as a price taker (i.e., having a perfectly elastic or horizontal demand curve). Many students did not know how to show economic profit; in many cases, there was no attempt to use the average total cost curve, which was indispensable for this exercise. Few students were able to show how a positive consumption externality leads to a divergence between private and social marginal benefits (essentially, using two market demand curves).

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

Students need to use "side-by-side" graphs when asked; otherwise, it is often difficult to discern their answers to questions that compare the market to the individual firm. Students also need to demonstrate a fuller understanding of the difference between negative and positive externalities.

Question 2

What was the intent of this question?

The intent of this question was to test students' understanding of the monopoly model. The concept of consumer surplus and the efficiency loss of monopoly were also included in the question.

How well did students perform on this question?

The mean score for this question was 3.11 out of a possible seven points. The average student response received somewhat less than 50 percent of the possible points.

What were common student errors or omissions?

Many students did not sufficiently explain the difference between the monopolist's price and marginal revenue, even when properly drawing the two curves on their graph. Also, many students neglected to mention that the "monopolist needed to lower the price *on all units* to sell additional units of output." Students frequently lost the point for consumer surplus. Finally, few students were able to identify correctly the deadweight loss of monopoly.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

Teachers need to stress the understanding of concepts like the marginal revenue and demand relationship. Simply drawing correct graphs may not be sufficient to earn full credit for a question. Teachers also need to spend more time on both consumer and producer surpluses and the efficiency loss of market failure.

Question 3

What was the intent of this question?

The intent of this question was to test students' understanding of the labor market. It was necessary to use "side-by-side" graphs to compare the results in the labor market with those for the individual firm. Students were also asked to show the impact on the firm's hiring from an increase in the labor productivity of a firm.

How well did students perform on this question?

The mean score for this question was 2.42 out of a possible seven points. Students did not perform well on this question, barely averaging 35 percent of the possible points.

What were common student errors or omissions?

Many students did not realize that the firm is a wage taker, facing a perfectly elastic labor supply curve. Also, students did not realize that the overall labor market would not be affected perceptibly by a change in labor productivity confined only to one firm.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

The fundamental problem for students was the apparent failure to cover the labor market within their AP Microeconomics courses. In many cases students confused the labor market with the output market. It would seem that too frequently teachers skip over or barely cover input markets; teachers should realize that the labor (or input) market is a fundamental concept that must be covered in a thoroughly designed microeconomics course.