

SOLUTIONS MANUAL



CASE
FAIR
OSTER

Principles of Macroeconomics
NINTH EDITION

Solutions to Problems

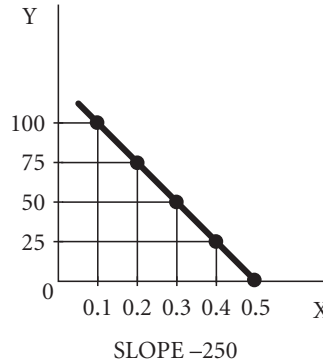
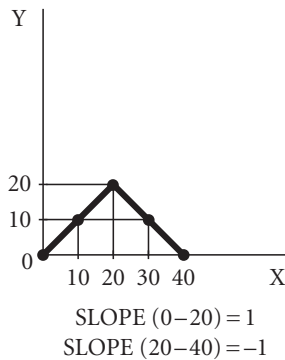
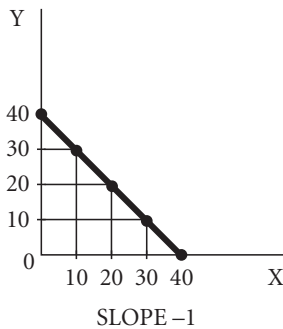
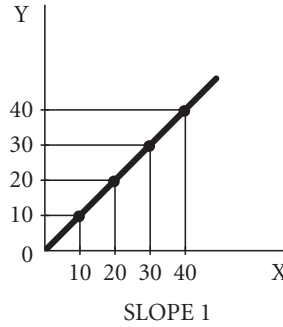
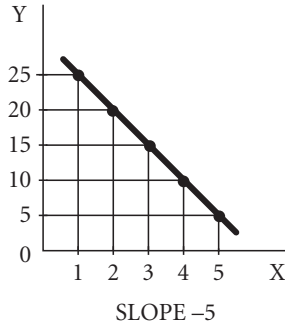
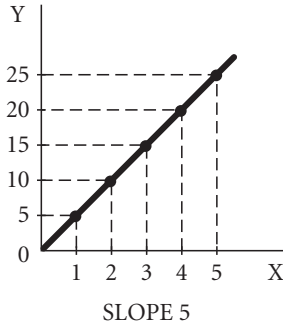
CHAPTER 1

1. Answers will vary, but should include the notion that each activity provides benefits in the form of satisfaction or additional income, but also takes time away from the pursuit of other activities (opportunity cost). Time spent on each activity is limited because the additional benefit of devoting an extra unit of time to any one activity falls as more time is devoted to the activity. Hence, as more and more time is spent on one activity, it will become increasingly attractive to devote the next unit of time to some other activity.
2. Answers will vary.
3. (a) normative
(b) positive
(c) normative
4. Average cost is \$1.17 ($\$19.95 \div 17$ hours). Marginal cost is \$0.
5. (a) The state should allow the market to provide what people want. Since gambling is not mandatory, only those who want to gamble will do so. Tax revenues that arise from casino gambling are paid voluntarily.
(b) Some argue that casino gambling is associated with criminal activity that has a cost to the community at large. In addition, gambling can be addictive, and sometimes entices those who can least afford it to participate. These concerns bear on the efficiency argument to the extent that there are costs from gambling not reflected in the price of gambling. These costs could potentially affect the community at large (e.g., more crime, the social cost of addiction) or the individual (to the extent that gambling creates unwanted addiction).
(c) Legalized gambling has a number of fairness issues around it. First, a lot of people want the services that a gambling casinos provide. It is clearly entertainment that many people like. (If you don't like Texas Hold 'em just watch it or go away). But many consider gambling to be bad. They think it is fair to tax "sins." A big fairness issue is that people who gamble may be addicted to it. Like many other issues of it's kind there are positives and negatives from the fairness side. First, since gamblers tend to be in low and moderate income brackets, gambling taxes and receipts would likely be regressive. That is, higher income households would pay a smaller percent of their income in taxes. Equity arguments are always the subject of disagreement.
6. (a) Tuition (which could have been spent on other things), forgone wages, study time, and so on.
(b) All the money (gas, depreciation of the car, and so on) could have been spent on other items; time spent en route could have been used for other activities.
(c) A better 'grade, no headache, perhaps admission to a better grad school, a higher-paying job. He has traded off an investment in human capital (staying in to study) for present consumption (going to the party).
(d) The other goods and services that Annie could buy with \$200
(e) The \$1 million could have been invested in other profit-making ventures or projects, or it could have been put in the bank or loaned to someone else with interest.
(f) From the standpoint of the store, Alex is free. From Alex's standpoint, he gives up other uses of time and wages that could be earned elsewhere.

7. Answers will vary

CHAPTER 1 APPENDIX

1. The slopes are as follows: line 1: 5; line 2: -5; line 3: 1; line 4: -1; line 5: slope is 1 as X goes from 0 to 20, and -1 as X goes from 20 to 40; line 6: -250.

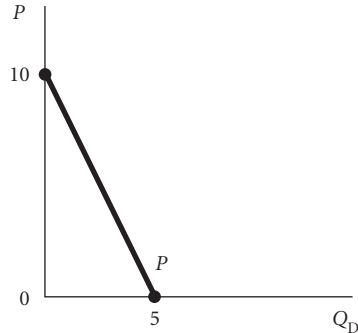
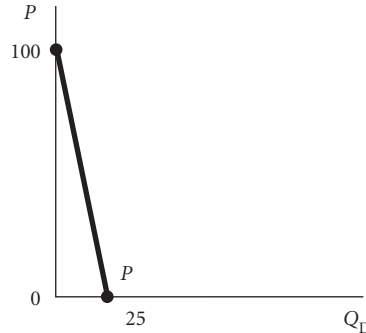
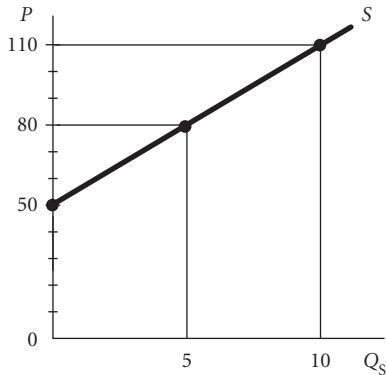
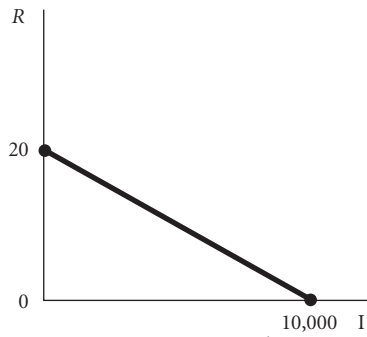


slope is 1 as x goes from 0 to 20,
and -1 as x goes from 20 to 40.

2. Answers will vary.

- (a) Negative slope. As price rises, quantity of apples purchased falls.
- (b) Positive (and declining) slope. As income rises, taxes rise; but the rise in taxes is less at higher incomes than at lower incomes.
- (c) Negative (and declining) slope. As mortgage rates fall, home sales increase; but the increase in home sales is more at lower mortgage rates than at higher mortgage rates.
- (d) Negative, then positive slope. As young children get older, they run faster; but as adults get older (beyond a certain age), they run slower.
- (e) Positive slope. Greater sunshine leads to greater corn yield.
- (f) Positive, then negative slope. Up to a point, more fertilizer increases corn yield; but beyond a certain point, adding more fertilizer actually decreases the yield.

3.

(a) SLOPE = -2 (b) SLOPE = -4 (c) SLOPE = $+6$ (d) SLOPE = $\frac{-1}{500} = -.002$

CHAPTER 2

1. Answers will vary, but should include:

- the value of alternative uses of time (studying for other classes, leisure).
- the value of alternative uses of time (studying, other forms of leisure).
- the value of the other goods and services that could have been purchased with the money used to purchase the car.
- the value of the goods and services that taxpayers could have purchased with the additional property tax revenue.
- the value of other goods and services that the governments could have purchased with the money used to purchase the space station, or the value of the goods and services that taxpayers could have purchased with the tax revenue used to finance the space station.
- the foregone salary that you would have earned and the value of the alternative uses of time.

2. Disagree. To be efficient, an economy must produce what people want. This means that in addition to operating on the *ppf* (resources are fully employed, best technology is being used), the economy must be operating at the *right* point on the *ppf*.

3. Opportunity costs of building the bridge include the value of other goods and services that the government of Mallsburg could have purchased with \$25 million or the value of the goods and ser-