SOLUTIONS TO TEXT PROBLEMS:

Quick Quizzes

1. The poverty rate measures the percentage of the population whose family income falls below an absolute level called the poverty line. It tells you something about the distribution of income at the lower end of the income scale.

Three potential problems in interpreting the measured poverty rate are: (1) in-kind transfers are not accounted for in the poverty rate, so the poverty rate overstates the amount of poverty; (2) the economic life cycle means that incomes are less equal in annual terms but more equal over people's lifetimes; and (3) the poverty rate is affected by temporary changes in income, but inequality would be better measured by looking at permanent income.

- 2. A utilitarian would want to redistribute income based on the assumption of diminishing marginal utility, so would favor some redistribution from Pam to Pauline. A liberal would want to maximize the utility of the least well off person in society, so would also favor redistribution. A libertarian would not want to redistribute income as long as the process of earning income was a fair one, so the libertarian would not want to redistribute income from Pam to Pauline.
- 3. Policies aimed at helping the poor include minimum-wage laws, welfare, a negative income tax, and in-kind transfers. Minimum-wage laws can help the working poor without any cost to the government, but have the disadvantage of causing unemployment among some workers. Welfare assists the poor with direct aid, but creates incentives for people to become needy. The negative income tax is a good way to implement a program of financial aid for the poor and does not distort incentives like other programs do, but it may support those who are lazy and unwilling to work. In-kind transfers provide goods and services directly to the poor, ensuring that the poor get necessities such as food and shelter, but assume that the government knows what the poor need the most.

Questions for Review

- 1. The richest fifth of the U.S. population earns about ten times as much income as the poorest fifth.
- 2. In comparison with other nations around the world, the United States is about average in terms of income equality. The United States has a more unequal

- distribution of income than countries like Germany and Canada, but a more equal distribution than many developing countries, such as Mexico and Brazil.
- 3. The most likely groups to live in poverty are blacks and Hispanics, children, and families headed by a female adult without a spouse present.
- 4. Since people may have temporarily high or low income and since income varies over the life cycle (people's incomes are lower when young and higher when older), annual income doesn't represent true inequality in living standards.
- 5. A utilitarian would like everyone to have equal incomes, but would recognize that redistributing income distorts incentives, so would proceed only part way to that goal. A liberal would go further than a utilitarian in equalizing incomes, since a liberal would focus on how well off is the worst-off person in society. A libertarian would not care about equalizing incomes at all as long as the process of getting income is fair.
- 6. In-kind transfers are beneficial because they ensure that the poor get what they need most. In particular, they get food and shelter instead of alcohol and drugs. But in-kind transfers aren't as beneficial to the recipients as cash because they provide no opportunity for substitution into more highly valued goods. The poor are in the best position to know what they need.
- 7. Antipoverty programs can discourage the poor from working because they effectively tax away earnings by reducing benefits when a person earns income. This disincentive could be reduced by not reducing the benefits as sharply, but the disadvantage is that the program would be much more expensive.

Problems and Applications

- 1. The factors contributing to the increase in income inequality in the United States during the past 20 years are the breakup of families, making poor families even poorer, and the increase in the number of two-career families, making rich families even richer.
- The percentage of children in families with income below the poverty line is almost twice the percentage of the elderly in such families because the Social Security system supports the elderly quite well, but the TANF (Temporary Assistance for Needy Families) program has bad incentive effects that tend to keep families from working their way out of poverty.

- 3. Students' current incomes are substantially less than their permanent incomes, so current incomes don't reflect their standards of living very well. They may borrow now or be supported by their parents, but their college education will pay off with higher future income.
- 4. a. To increase economic mobility within a generation, the government could support training programs (to provide skills to unskilled workers) and workfare instead of welfare (to help the poor increase their incomes).
 - b. To increase economic mobility across generations, the government might increase its support for education.
 - c. The advantage of reducing spending on welfare to increase spending on programs that enhance economic mobility is that it gives people greater incentive to work hard to get ahead. The disadvantages are that such programs are expensive and are hard on those who do not make it.
- 5. Community 1 has ten families with income of \$100 each and ten families with income of \$20 each. Community 2 has ten families with income of \$200 each and ten families with income of \$22 each.
 - a. Community 2 has more unequal income than community 1. In community 2 the rich have nearly ten times the income of the poor, while in community 1 the rich have only five times the income of the poor. However, the problem of poverty is likely to be slightly worse in community 1, since the poor have lower income.
 - b. Rawls would prefer the distribution of income in community 2, since the worst-off family has more income than in community 1.
 - c. Most people will prefer the income distribution of community 2, since both rich and poor families are better off than their counterparts in community 1, even though inequality is greater.
- 6. a. Leaks in the bucket are caused by the administrative costs of redistributing income, people who lie about their income to cheat the system, and the fact that labor supply is elastic, so that redistributive taxes reduce labor supply.
 - Generally, Republicans believe the redistributive bucket is more leaky than do Democrats. As a result, they think the government should do less redistribution of income than do Democrats.

- 7. a. A utilitarian would argue that the marginal utility of income for the person with an income of \$10,000 is higher than the marginal utility of income for someone with an income of \$30,000, so income should be redistributed.
 - b. Rawls would prefer the second distribution since the worst-off person is better off than in the first distribution.
 - Nozick would not find either more equitable. He would think the most equitable distribution is the one in which people got what they deserved. If the rules of the game are fair, either distribution is quite acceptable.
- 8. a. If people received cash instead of Medicaid benefits, it is unlikely that they would spend as much on health care. Instead, they would purchase other things they desire.
 - b. This suggests that we probably should not value in-kind transfers at the price the government pays for them. They may not be worth as much as their cost.
 - c. Since the poor would prefer other things to Medicaid, it might be better to give them cash transfers instead.
- a. The following table shows pre-tax income, taxes paid to the government (a negative amount means money is received from the government), and aftertax income:

| Pre-Tax Income | Taxes | After-Tax Income |
|----------------|-------------------|------------------|
| \$ 0 | \$ -10,000 | \$10,000 |
| 10,000 | -5,000 | 15,000 |
| 20,000 | 0 | 20,000 |
| 30,000 | 5,000 | 25,000 |
| 40,000 | 10,000 | 30,000 |

- b. The marginal tax rate is 50 percent, since an increase in pre-tax income of \$10,000 leads to higher taxes of \$5,000. The maximum income at which a family receives money from the government is \$19,999.99.
- c. The change in the tax schedule gives a marginal tax rate of 25 percent. The maximum income at which a family receives money from the government is now \$39,999.99.
- d. The advantage of the first tax schedule is that the after-tax income distribution would be more equal. The advantage of the second tax schedule is that the marginal tax rate would be lower, so it would not cause

as much of a distortion to labor supply.

- 10. Since John believes that labor supply is highly elastic, he will want less redistribution of income, because elastic labor supply means a greater distortion from redistributive policies.
- 11. a. If you agree with the statement that "Every parent has the right to work hard and save in order to give his or her children a better life," then you will think that inheritance taxes should be low. If you disagree, you will think that inheritance taxes should be high.
 - b. If you agree with the statement that "No child should be disadvantaged by the sloth or bad luck of his or her parents," then you will think that inheritance taxes should be high. If you disagree, you will think that inheritance taxes should be low.