ECONOMICS: THE WORLD AROUND YOU

FUNDAMENTAL QUESTIONS

1. Why study economics?

   There are several good reasons why you should study economics:

   - Economics is one of the best tools for understanding how the world around you works and why it works the way it does.
   - Economics majors can make a lot of money—business economists make an average of over $80,000 per year. Economics is the highest-paying social science, and starting salaries for economics majors are higher than for marketing and management majors.
   - A bachelor's degree in economics prepares you for a variety of occupations in addition to being an economist: careers in business in general and banking in particular, and careers in journalism, international relations, government and the nonprofit sector, and other areas.
   - A bachelor's degree in economics also provides an excellent background for graduate degrees in law, business, public administration, health-care administration, environmental studies, and a variety of other areas.
   - Studying economics can be interesting, even fun—you discover a lot of unexpected things.

2. What is economics?

   Economics is the study of how people choose to allocate scarce **resources** to satisfy their unlimited wants. There are several words in this definition that should be emphasized. First, people allocate *scarce* resources. If there was enough of a resource to go around so that everyone could have as much as he or she wanted, there would be no need to allocate.

   The definition states that people have *unlimited wants.* Notice that it says *wants,* not *needs.* People *act* on the basis of their wants, not necessarily on the basis of their needs. (Otherwise they would not buy strawberry sundaes.) If each of us made a list right now of the top ten things we would like to have and our fairy godmother popped out of the air and gave us what we wanted, most of us immediately would find that there are ten *more* things we'd like to have. Because resources are scarce and wants are unlimited, economics studies the best way to allocate resources so that none are wasted.

3. What is the economic way of thinking?

   The economic way of thinking focuses on **positive,** as opposed to **normative, analysis.**

Key Terms

scarcity	inputs	normative analysis
economic good	land	fallacy of composition
free good	labor	association as causation
economic bad	capital	microeconomics
resources	rational self-interest	macroeconomics
factors of production	positive analysis	

Quick-Check Quiz

Section 1: Why Study Economics?

1. The objective of economics is to
   a. make money.
   b. entertain students.
   c. enrich professors.
   d. bore students.
   e. explain why the world is what it is.

2. On average, someone with a college degree can expect to earn about _____ more between the ages of 25 and 64 than someone who does not go to college.
   a. $10,000
   b. $100,000
   c. $1,000,000
   d. $10,000,000
   e. $100,000,000

3. Which of the following occupations does a bachelor's degree in economics prepare you for?
   a. business
   b. banking
   c. journalism
   d. international relations
   e. all of the above

Section 2: The Definition of Economics

1. Which of the following is *not* an economic good?
   a. wine
   b. bicycles
   c. refrigerators
   d. air pollution
   e. education

2. Which of the following is *not* one of the three categories of resources?
   a. land
   b. automobiles
   c. capital
   d. labor
   e. None of the above are categories for resources.

3. The payment for capital is called
   a. rent.
   b. wages.
   c. salaries.
   d. interest.
   e. profit.

4. If an item is scarce,
   a. it is not an economic good.
   b. at a zero price the amount of the item that people want is less than the amount that is available.
   c. there is not enough of the item to satisfy everyone who wants it.
   d. there is enough to satisfy wants even at a zero price.
   e. it must be a resource as opposed to an input.

5. Which of the following is a free good?
   a. clean air
   b. water from a river
   c. education
   d. golf lessons
   e. None of the above is a free good.

6. The payment for land is called
   a. wages and salaries.
   b. rent.
   c. interest.
   d. profit.
   e. financial capital.

7. Rational self-interest
   a. dictates that individuals with the same information will make identical choices.
   b. means that people are completely selfish.
   c. explains why people give money to charitable organizations.
   d. explains why all drivers wear seat belts.
   e. means that people choose options that they think will give them the smallest amount of satisfaction.

Section 3: The Economic Approach

1. Analysis that does not impose the value judgments of one individual on the decisions of others is called _____ analysis.
   a. positive
   b. normative
   c. economic
   d. noneconomic
   e. the scientific method of

2. If an individual decides to save more, he or she can save more. Therefore, if society as a whole decides to save more, it will be able to save more. This reasoning is faulty and as such is an example of
   a. a normative statement.
   b. the fallacy of composition.
   c. the interpretation of association as causation.
   d. the fallacy of division.
   e. none of the above—this reasoning is not faulty.

3. Tim has noticed that every time he washes his car in the morning, it rains that afternoon. Because he believes he can cause it to rain by washing his car, he has decided to sell his services to farmers in drought-stricken areas. This reasoning is mistaken and as such is an example of
   a. a normative statement.
   b. the fallacy of composition.
   c. the mistaken interpretation of association as causation.
   d. the fallacy of division.
   e. none of the above—Tim's reasoning is not faulty.

4. Which of the following is a normative statement?
   a. Lower interest rates encourage people to borrow.
   b. Higher prices for cigarettes discourage people from buying cigarettes.
   c. If the price of eggs fell, people probably would buy more eggs.
   d. There should be a higher tax on cigarettes, alcohol, and other "sin" items to discourage people from buying them.
   e. A higher interest rate encourages people to save more.

5. Microeconomics includes the study of
   a. how an individual firm decides the price of its product.
   b. inflation in the United States.
   c. how much output will be produced in the U.S. economy.
   d. how many workers will be unemployed in the U.S. economy.
   e. how the U.S. banking system works.

6. Which of the following is part of microeconomics rather than macroeconomics?
   a. measuring how fast the economy is growing
   b. determining how the price of wheat is set
   c. preventing high unemployment
   d. determining how quickly money flows through the economy
   e. calculating the effects of government spending on inflation

7. Which of the following is part of macroeconomics rather than microeconomics?
   a. calculating the costs of producing automobiles
   b. determining how consumers choose how many apples to buy
   c. measuring the unemployment rate
   d. determining whether a market is a monopoly
   e. measuring how makers of computer chips react to price changes

Practice Questions and Problems

Section 1: Why Study Economics?

1. Economics has been defined as the study of _____ consequences.
2. In the year 2000, the median base salary for business economists was _____.
3. List at least five fields of graduate study for which an economics bachelor's degree is excellent preparation.

   _____

   _____

   _____

   _____

   _____

Section 2: The Definition of Economics

1. _____ exists when less of something is available than people want at a zero price.
2. Any good that is scarce is a(n) _____ good.
3. If there is enough of a good available at a zero price to satisfy wants, the good is called a(n) _____ good.
4. A good that people will pay to have less of is called an economic _____ .
5. People use scarce resources to satisfy their _____ wants.
6. _____ means that people make the choices that they think will give them the greatest amount of satisfaction.
7. List the three categories of resources and the payments associated with each.

   _____

   _____

   _____

8. _____ includes all natural resources, such as minerals, timber, and water, as well as the land itself.
9. _____ refers to the physical and intellectual services of people.
10. _____ is a manufactured or created product used solely to produce goods and services.
11. _____ capital refers to the money value of capital as represented by stocks and bonds.
12. Resources also are called _____ or _____ .

13. _____ are nonphysical products.

14. Economists believe human beings are _____ , not selfish.

15. What is economics?

    _____

    _____

    _____

    _____

Section 3: The Economic Approach

1. Analysis that does not impose the value judgments of one individual on the decisions of others is

   called _____ analysis.

2. _____ analysis involves imposing value judgments on the decisions of others.

3. Economists generally agree on the _____ aspects of economics.

4. _____ is the study of economics at the level of the individual economic entity.

5. The _____ is the error of attributing what applies to one to the case of many.

6. The mistaken interpretation of _____ occurs when unrelated or coincidental events that

   occur at about the same time are believed to have a cause-and-effect relationship.

7. The outcome of positive analysis _____ as society's norms change.

8. The study of the economy as a whole is called _____ .

Thinking About and Applying Economics: The World Around You

I.   The Relationship Between Speed Limits and Highway Deaths

In twenty-two of the thirty-eight states that chose to raise the speed limit on rural highways, highway deaths jumped 46 percent between May and July 1986. Former Transportation Committee Chairman James Howard attributed the increase in deaths to the higher speed limit. Can you think of any other reasons that highway deaths might have increased? If states that did not increase rural speed limits experienced a similar increase in highway deaths, what common mistake might Chairman Howard have made?

_____

_____

_____

_____

II.   Scarce Parking in Wichita?

The following is an excerpt from the *Wichita Eagle:*

> It's become part of Wichita lore. Folks in these parts are nutty about parking.
> They want it free. They want it at the front door of wherever they're going. They refuse to look for a parking space anywhere for more than eight or ten seconds. And they think the downtown Wichita parking situation is horrible.
> The fact is, there's plenty of parking in the city's core. About 20,000 people work downtown. There are almost 19,000 parking spaces. That nearly 1-to-1 ratio is better than other cities in the region such as Oklahoma City, and it's just as good as Topeka. And the average distance a person has to walk is about a block. That's better than similar-sized cities.

The editorial laments that people don't go downtown for activities because they think they'll have trouble parking and comments on a new report by the Metropolitan Area Planning Commission.

Relying on the information in the editorial, discuss whether parking spaces can be considered a scarce resource in downtown Wichita.

_____

_____

_____

_____

Chapter 1   Homework Problem

Name _____

A recent edition of the *Wall Street Journal* reported that some states were subsidizing Amtrak passenger trains so that state residents would have railroad transportation available.

The state of Oregon, however, had just decided to stop subsidizing a train between Eugene and Portland, Oregon, even though that meant the train would stop running. State Senator Greg Walden explained the decision this way: "Subsidizing rail passengers isn't as high a priority as kids' education and keeping criminals behind bars."

Using the concepts you learned in Chapter 1, explain the economic logic underlying Senator Walden's comments.

If your instructor assigns this problem, write your answer above, then tear out this page and hand it in.

Answers

Quick-Check Quiz

Section 1: Why Study Economics?

1. e; 2. c; 3. e
If you missed any of these questions, you should go back and review Section 1 in Chapter 1.

Section 2: The Definition of Economics

1. d; 2. b; 3. d; 4. c; 5. e; 6. b; 7. c
If you missed any of these questions, you should go back and review Section 2 in Chapter 1.

Section 3: The Economic Approach

1. a; 2. b; 3. c; 4. d; 5. a; 6. b; 7. c
If you missed any of these questions, you should go back and review Section 3 in Chapter 1.

Practice Questions and Problems

Section 1: Why Study Economics?

1. unintended
2. $83,000
3. law, business, economics, government, public administration, environmental studies, health-care administration, labor relations, urban planning, diplomacy

Section 2: The Definition of Economics

1. Scarcity
2. economic
3. free
4. bad
5. unlimited
6. Rational self-interest
7. land; rent
   labor; wages
   capital; interest
8. Land
9. Labor
10. Capital
11. Financial
12. factors of production; inputs
13. Services
14. self-interested
15. Economics is the study of how people choose to use their scarce resources to attempt to satisfy their unlimited wants.

Section 3: The Economic Approach

1. positive
2. Normative
3. positive
4. Microeconomics
5. fallacy of composition
6. association as causation
7. does not vary
8. macroeconomics

Thinking About and Applying Economics: The World Around You

I. *The Relationship Between Speed Limits and Highway Deaths*

Other factors that might have increased highway deaths include the following:

1. Has there been an increase in population? It seems reasonable to expect more accidents as congestion increases.
2. Are Americans buying more smaller cars? If so, auto deaths would be expected to increase because smaller cars provide less protection in a crash.
3. Has there been an increase in the number of people drinking (or otherwise impaired) and driving? If so, we would expect an increase in the number of traffic fatalities no matter what the speed limit was.

Perhaps you can think of other factors that might account for the increase in traffic fatalities that Howard attributed to the higher speed limit. If Howard had wrongly attributed the higher death toll to the higher speed limit, he would have been mistaking association for causation.

II. *Scarce Parking in Wichita?*

If there is not enough of an item to satisfy everyone who wants it at a zero price, then an item is scarce. If people want parking at the front door of wherever they are going and have to walk, on average, about a block, parking is scarce.

WORKING WITH GRAPHS

Summary

Most people are visually oriented: they are better able to understand things that they can "picture." The pictures that economists use to explain concepts are called *graphs.*

There are three commonly used types of graphs: the line graph, the bar graph, and the pie graph. The pie graph (or chart) is used to show the relative magnitude of the parts that make up a whole. Line graphs and bar graphs are used to show the relationship between two variables. One of the variables, the **independent variable,** has values that do not depend on the values of other variables. The values of **dependent variables** do depend on the values of other variables.

When two variables move in the same direction together, their relationship is called a **direct,** or **positive, relationship,** and the **slope** of the line or curve relating the two variables will be positive. When two variables move together but in opposite directions, their relationship is an **inverse,** or **negative, relationship,** and the slope of the line or curve relating the two variables will be negative. A curve **shifts** when, for each combination of variables measured on the horizontal and vertical axes, one of the variables changes by a certain amount while the other variable remains the same. Shifts occur when variables other than those on the axes are allowed to change.

The slope of a line is the ratio of the rise to the run. The slope of a straight line is the same at all points on the line. The slope of a curve that is not a straight line changes at every point on the curve. We can find the maximum or minimum point on a curve by finding where the slope of the curve is equal to zero. Where a slope goes from positive to zero to negative, a maximum occurs. Where a slope goes from negative to zero to positive, a minimum occurs.

Key Terms

|		
independent variable	positive relationship	negative relationship
dependent variable	inverse relationship	slope
direct relationship		

Practice Questions and Problems

1. The owner of a business that sells home heating oil has noticed that the amount of heating oil sold increases as the temperature outside decreases. Heating oil is the _____ (dependent, independent) variable. The relationship between the two variables is _____ (direct, inverse), and the slope of the line will be _____ (positive, negative). Use the graph

below to show the nature of the relationship between home heating oil sales and outside temperature. Be sure to label your axes.
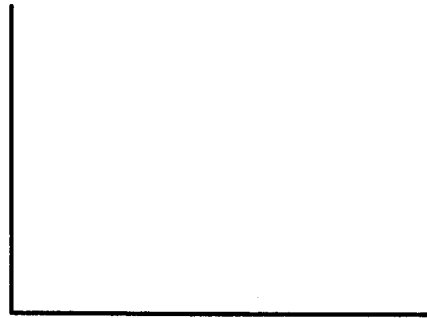

2. The slope of a straight-line curve is the same at all points. True or false?

3. The table below shows the relationship between the price of milk and the quantity of milk that dairy farmers are willing to offer for sale. This relationship is _____ (direct, inverse). The slope of the line will be _____ (positive, negative). Plot the curves on the graph below.

Price of Milk	Quantity of Milk Offered for Sale
$ .50	0
.75	2
1.00	4
1.25	6
1.50	8
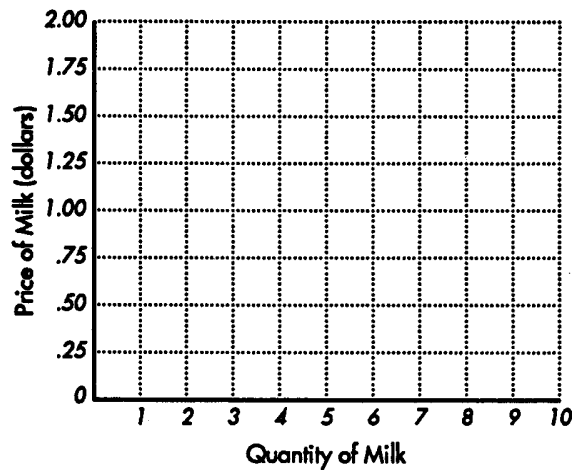
4. Consider the relationship between household spending (consumption) and national income on the graph below and answer the following questions.
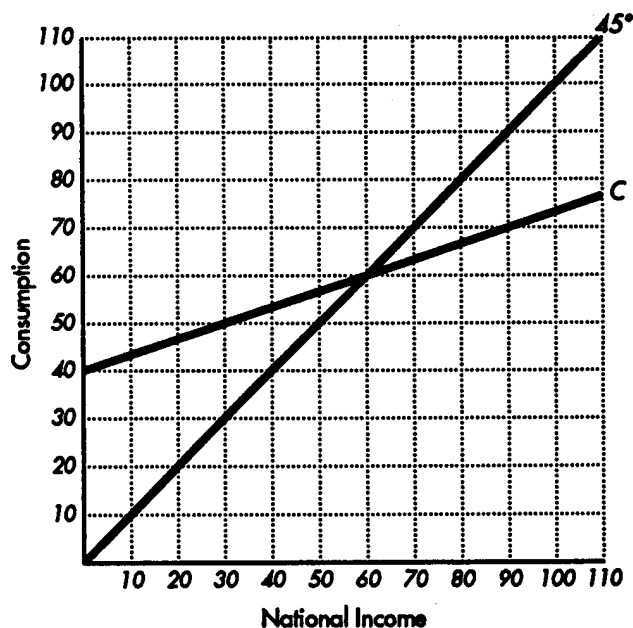

a. The relationship between consumption and income is _____ (direct, inverse).

b. What is the slope of the line? _____

The intercept? _____

c. What is the equation for this line? _____

d. At what point does consumption equal income? _____

5. The graph below shows the percentages of income that the King family spends, pays in taxes, and saves. What kind of graph is this? _____
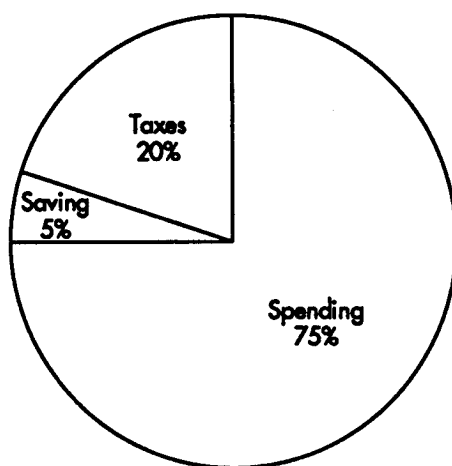
6. The table below shows the relationship between the quantity of airplanes built at a production plant in Wichita and the average cost per airplane. Make up a set of figures that shows that a minimum average cost occurs at 40,000 airplanes.

Quantity of Airplanes	Average Cost per Airplane
10,000	_____
20,000	_____
30,000	_____
40,000	_____
50,000	_____
60,000	_____
70,000	_____
80,000	_____

7. The demand for Mardi's Tacos in Hammondville is given by the equation $P = \$2.00 - .02Q$, where P is the price of tacos in dollars and Q is the quantity demanded of tacos. Plot the demand for Mardi's Tacos on the graph below.
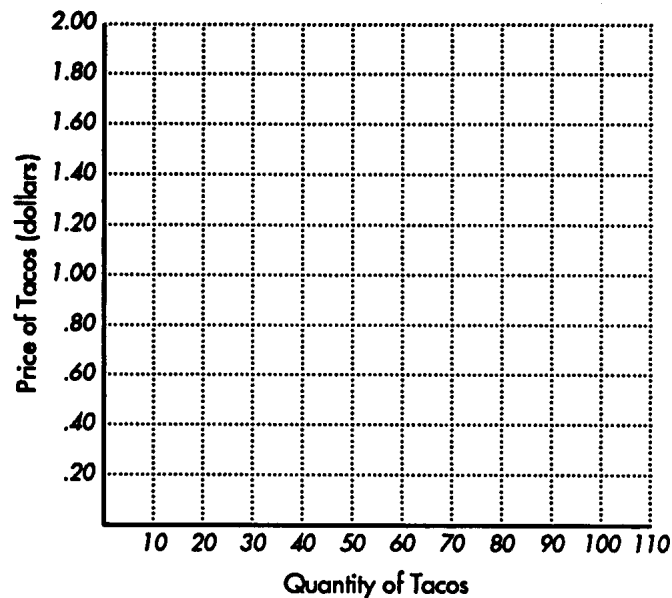
The relationship between price and quantity demanded is _____ (direct, inverse).

8. The supply for tacos in Hammondville is given by the equation $P = \$.40 + .005Q$, where P is the price of tacos in dollars and Q is the quantity supplied of tacos. Plot the supply of tacos on the graph below. Label the supply S.
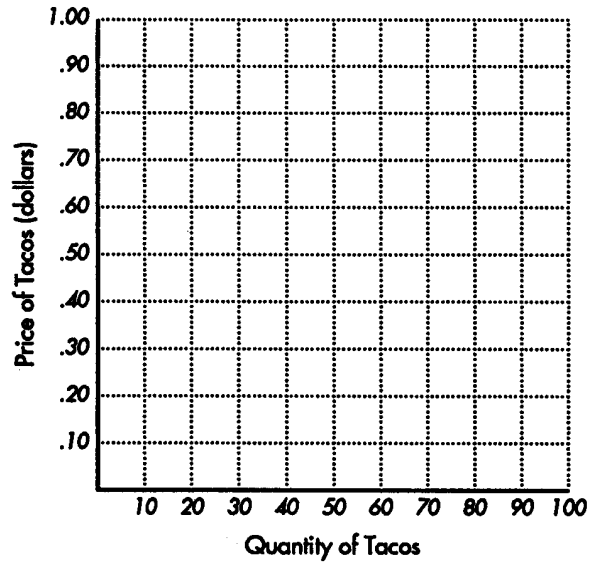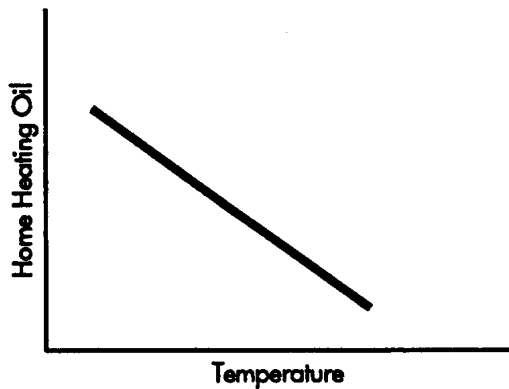

The relationship between price and quantity supplied is _____ (direct, inverse).
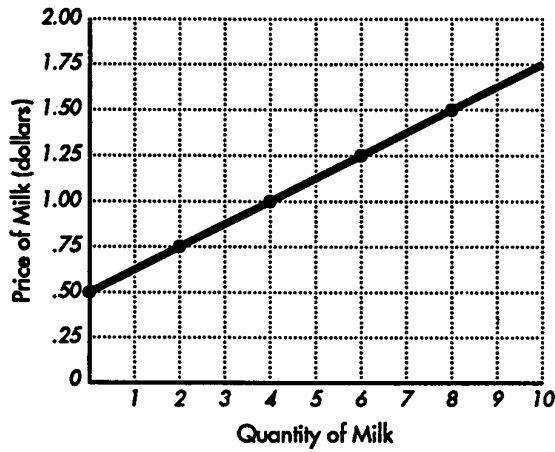
9. Several taco sellers in Hammondville have closed down, changing the equation for the supply of tacos to $P = \$.60 + .005Q$. Plot the new supply on the graph above and label the line S_1.
   At each price, sellers will produce a _____ (larger, smaller) quantity than before.

Answers

1. dependent; inverse; negative

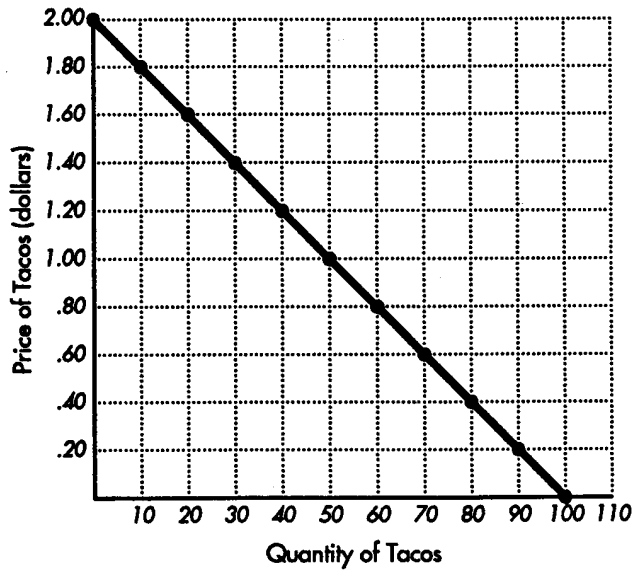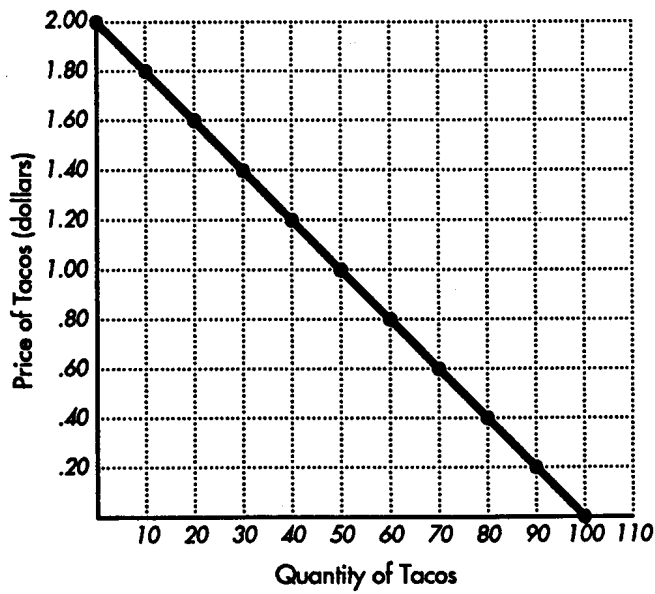2. true
3. direct; positive

4. a. direct
   b. $\frac{1}{3}$; 40
   c. $C = 40 + \frac{1}{3}Y$
   d. 60
5. pie chart
6. There are many possible solutions. The numbers need to decrease until you reach the quantity 40,000 and increase thereafter. Here is one possible solution:

Quantity of Airplanes	Average Cost per Airplane
10,000	$ 40
20,000	30
30,000	20
40,000	10
50,000	20
60,000	30
70,000	40
80,000	50

7. inverse

8. direct

9. smaller