CR Mixed-bag Part 1

- 1. Although fullerenes—spherical molecules made entirely of carbon—were first found in the laboratory, they have since been found in nature, formed in fissures of the rare mineral shungite. Since laboratory synthesis of fullerenes requires distinctive conditions of temperature and pressure, this discovery should give geologists a test case for evaluating hypotheses about the state of the Earth's crust at the time these naturally occurring fullerenes were formed. Which of the following, if true, most seriously undermines the argument?
- A. Confirming that the shungite genuinely contained fullerenes took careful experimentation.
- B. Some fullerenes have also been found on the remains of a small meteorite that collided with a spacecraft.
- C. The mineral shungite itself contains large amounts of carbon, from which the fullerenes apparently formed.
- D. The naturally occurring fullerenes are arranged in a previously unknown crystalline structure.
- E. Shungite itself is formed only under distinctive conditions.
- 2. Economist: On average, the emergency treatment for an elderly person for injuries resulting from a fall costs \$11,000. A new therapeutic program can significantly reduce an elderly person's chances of falling. Though obviously desirable for many reasons, this treatment program will cost \$12,500 and thus cannot be justified. Which of the following, if true, most seriously undermines the conclusion of the argument?
- A. Among elderly people who had followed the program for only a few months, the number of serious falls reported was higher than it was for people who had followed the program for its recommended minimum length of one year.
- B. Falls resulting in serious injuries are less common among elderly people living in nursing homes than they are among elderly people who live alone at home.
- C. A frequent result of injuries sustained in falls is long-term pain, medication for which is not counted among the average per-person costs of emergency treatment for elderly people's injuries from such falls.
- D. The new therapeutic program focuses on therapies other than medication, since overmedication can cause disorientation and hence increase the likelihood that an elderly person will have a serious fall.
- E. A significant portion of the cost of the new therapeutic program is represented by regular visits by health care professionals, the costs of which tend to increase more rapidly than do those of other elements of the program.
- 3. The prairie vole, a small North American grassland rodent, breeds year-round, and a group of voles living together consists primarily of an extended family, often including two or more litters. Voles commonly live in large groups from late autumn through winter; from spring through early autumn, however, most voles live in far smaller groups. The seasonal variation in group size can probably be explained by a seasonal variation in mortality among young voles. Which of the following, if true, provides the strongest support for the explanation offered?
- A. It is in the spring and early summer that prairie vole communities generally contain the highest proportion of young voles.
- B. Prairie vole populations vary dramatically in size from year to year.
- C. The prairie vole subsists primarily on broad-leaved plants that are abundant only in spring.
- D. Winters in the prairie voles' habitat are often harsh, with temperatures that drop well below freezing.
- E. Snakes, a major predator of young prairie voles, are active only from spring through early autumn.
- 4. A popular beach has long had a dolphin feeding program in which fish are given to dolphins several times a day; many dolphins get as much as half of their food each day there. Although dolphins that first benefit from the program as adults are healthy and long-lived, their offspring have a lower life expectancy than offspring of dolphins that feed exclusively in the wild. Which of the following, if true, most helps to explain the lower life expectancy of offspring of dolphins feeding at the beach compared to other young dolphins?
- A. Sharks that prey on dolphins are less common in the open seas off the beach than in many other areas of the open seas where dolphins congregate.
- B. Many of the adult dolphins that feed at the beach are females that nurse their offspring there.
- C. The fish given to the dolphins at the beach are the same types of fish that dolphins typically catch in the wild.
- D. Many dolphins that feed at the beach with their offspring come to the beach only a few times a month.
- E. Adult dolphins that feed at the beach spend much less time teaching their offspring how to catch fish in the wild than do other adult dolphins.

- 5. Tiger sharks are common in the waters surrounding Tenare Island. Usually tiger sharks feed on smaller sharks, but sometimes they have attacked tourists swimming and surfing at Tenare's beaches. This has hurt Tenare's tourism industry, which is second only to its fishing industry in annual revenues. In order to help the economy, therefore, the mayor of the island has proposed an ongoing program to kill any tiger sharks within a mile of the beaches. Which of the following, if true, most strongly calls into question the likelihood that implementation of the mayor's proposal will have the desired consequence?
- A. Even if not all the tiger sharks that come close to the beaches are killed, the existence of the program would reassure tourists.
- B. Business owners who depend on tourism are willing to pay most of the cost of implementing the program.
- C. Tourists come to Tenare Island for its beaches, even though the island features a number of other tourist attractions.
- D. The small sharks on which tiger sharks prey feed on fish that are commercially important to the island's fisheries.
- E. Not all tourists who come to Tenare Island enjoy swimming or surfing.
- 6. The country of Ertland has never imported apples in any significant quantity because consumers there generally prefer the unique texture of Ertland-grown apples. Nevertheless, apple growers from Kosolia, a neighboring country, plan to sell their apples in Ertland by selling Kosolia-grown apples at half the price of local apples and promoting them as a nourishing, low-cost alternative. Which of the following, if true, casts most doubt on the viability of the plan by Kosolia's apple growers to sell their apples in Ertland?
- A. Most of the varieties of apples grown in Ertland were originally derived from common Kosolian varieties.
- B. Consumers in Ertland tend to spend about the same proportion of their income on fresh fruits and vegetables as do consumers in Kosolia.
- C. At times in the past, Ertland has exported significant quantities of apples to Kosolia.
- D. Some varieties of apples grown in Kosolia can be harvested throughout most of the year, whereas the varieties grown in Ertland can be harvested only during two months of the year.
- E. Profiles of Ertland-grown apples are high enough in Ertland that growers, wholesalers, and retailers there could easily afford to reduce the price at which these apples are sold.
- 7. As part of major renovations to Flowertown's Main Street train station, consultants to the train company proposed moving the station's entrance from its current valuable Main Street location to a low-rent adjoining side street and then leasing the high-rent entrance space to retail businesses. In that way, the train company could easily pay for those and all other proposed renovations without negative impact on its tight budget. Which of the following, if true, would most strongly support the consultants' proposal?
- A. More train commuters are employed in businesses located on Main Street than in businesses located on the adjoining side street.
- B. A reliable survey of Flowertown's commuters showed that virtually none of them would use the train any less frequently if the station's entrance were moved.
- C. The high-rent block of Flowertown's Main Street includes several buildings whose owners currently seek to replace long-standing tenants lost in recent months.
- D. If the station's entrance were moved, the train company would need to begin costly renovations to its Main Street entrance space.
- E. Ridership on Flowertown trains declined only slightly from 1970 to 1985 while other train companies lost large numbers of commuters.
- 8. **Automobile Dealer's Advertisement:** The Highway Traffic Safety Institute reports that the PZ 1000 has the fewest injuries per accident of any car in its class. This shows that the PZ 1000 is one of the safest cars available today. Which of the following, if true, most seriously weakens the argument in the advertisement?
- A. The Highway Traffic Safety Institute report listed many cars in other classes that had more injuries per accident than did the PZ 1000.
- B. In recent years many more PZ 1000s have been sold than have any other kind of car in its class.
- C. Cars in the class to which the PZ 1000 belongs are more likely to be involved in accidents than are other types of cars.
- D. The difference between the number of injuries per accident for the PZ 1000 and that for other cars in its class is quite pronounced.
- E. The Highway Traffic Safety Institute issues reports only once a year.

- 9. Scientists are discussing ways to remove excess carbon dioxide from the atmosphere by increasing the amount that is absorbed by plant life. One plan to accomplish this is to establish giant floating seaweed farms in the oceans. When the seaweed plants die, they will be disposed of by being burned for fuel. **Which of the following, if true, would indicate the most serious weakness in the plan above?**
- A. Some areas of ocean in the Southern Hemisphere do not contain sufficient nutrients to support large seaweed farms.
- B. When a seaweed plant is burned, it releases an amount of carbon dioxide comparable to the amount it has absorbed in its lifetime.
- C. Even if seaweed farms prove effective, some people will be reluctant to switch to this new fuel.
- D. Each year about seven billion tons of carbon dioxide are released into the atmosphere but only about five billion tons are absorbed by plant life.
- E. Seaweed farms would make more money by farming seaweed to sell as nutritional supplements than by farming seaweed to sell as fuel.
- 10. **Jennifer**: Video rental outlets in Centerville together handled 10,000 fewer video rentals in 1994 than in 1993. The decline in rentals was probably due almost entirely to the February 1994 opening of Videorama, the first and only video rental outlet in the area that, in addition to renting videos, also sold them cheaply.

Brad: There must be another explanation: as you yourself said, the decline was on the order of 10,000 rentals. Yet Videorama sold only 4,000 videos in 1994.

Which of the following, if true, would most seriously weaken the force of the objection that Brad presents to Jennifer's explanation?

- A. In 1994 Videorama rented out more videos than it sold.
- B. In 1994 two new outlets that rent but that do not sell videos opened in Centerville.
- C. Most of the video rental outlets in Centerville rent videos at a discount on certain nights of the week.
- D. People often buy videos of movies that they have previously seen in a theater.
- E. People who own videos frequently loan them to their friends.
- 11. **Mourdet Winery**: Danville Winery's new wine was introduced to compete with our most popular wine, which is sold in a distinctive tall, black bottle. Danville uses a similar bottle. Thus, it is likely that many customers intending to buy our wine will mistakenly buy theirs instead.

Danville Winery: Not so. The two bottles can be readily distinguished: the label on ours, but not on theirs, is gold colored.

Which of the following, if true, most undermines Danville Winery's response?

- A. Gold is the background color on the label of many of the wines produced by Danville Winery.
- B. When the bottles are viewed side by side, Danville Winery's bottle is perceptibly taller than Mourdet Winery's.
- C. Danville Winery, unlike Mourdet Winery, displays its wine's label prominently in advertisements.
- D. It is common for occasional purchasers to buy a bottle of wine on the basis of a general impression of the most obvious feature of the bottle.
- E. Many popular wines are sold in bottles of a standard design.
- 12. **Finding of a survey of Systems magazine subscribers**: Thirty percent of all merchandise orders placed by subscribers in response to advertisements in the magazine last year were placed by subscribers under age thirty-five.

Finding of a survey of advertisers in Systems magazine: Most of the merchandise orders placed in response to advertisements in Systems last year were placed by people under age thirty-five.

For both of the findings to be accurate, which of the following must be true?

- A. More subscribers to Systems who have never ordered merchandise in response to advertisements in the magazine are age thirty-five or over than are under age thirty-five.
- B. Among subscribers to Systems, the proportion who are under age thirty-five was considerably lower last year than it is now.
- C. Most merchandise orders placed in response to advertisements in Systems last year were placed by Systems subscribers over age thirty-five.
- D. Last year, the average dollar amount of merchandise orders placed was less for subscribers under age thirty-five than for those age thirty-five or over.
- E. Last year many people who placed orders for merchandise in response to advertisements in Systems were not subscribers to the magazine.

13. Which of the following most logically completes the argument?

United States manufacturers currently produce most of the world's solar-power generators—most of which are exported to Europe. However, European manufacturers are emerging and probably will ultimately capture much of the European market. The United States government is funding initiatives intended to encourage use of solar power within the United States. If these initiatives succeed in increasing the demand for solar-power generators in the United States, United States manufacturers will probably maintain significant production levels, since _______.

- A. some United States manufacturers have been substantially increasing their output over the last several years
- B. the efficiency of solar-power generators in converting energy from the Sun into electric power is not improving as fast as it once did
- C. just as European manufacturers enjoy certain competitive advantages in Europe, so do United States manufacturers in the United States
- D. European governments are currently undertaking initiatives to stimulate the use of solar power within Europe
- E. the current market for solar-power generators in the United States is very limited
- 14. The higher the level of certain vitamins and minerals in the bloodstream, the better a person's lung function, as measured by the amount of air the person can expel in one second. The lung function of smokers is significantly worse, on average, than that of nonsmokers. Clearly, therefore, one way for smokers to improve their lung function is for them to increase their intake of foods that are rich in these helpful vitamins and minerals. Which of the following is an assumption on which this argument depends?
- A. Smokers are less likely than nonsmokers to have diets that are rich in vitamins and minerals.
- B. The lung function of smokers whose diets are rich in those vitamins and minerals is generally better than that of nonsmokers with comparable diets.
- C. People whose diets are deficient in those vitamins and minerals do not typically have other health problems in addition to diminished lung function.
- D. Stopping smoking will not typically improve lung function more than any diet changes can.
- E. Smoking does not introduce into the body chemicals that prevent the helpful vitamins and minerals from entering the bloodstream.
- 15. **Astronomer**: Observations of the Shoemaker-Levi comet on its collision course with Jupiter showed that the comet broke into fragments before entering Jupiter's atmosphere in 1994, but they did not show how big those fragments were. In hopes of gaining some indication of the fragments' size, astronomers studied spectrographic analyses of Jupiter's outer atmosphere. These analyses revealed unprecedented traces of sulfur after the fragments' entry. **The fragments themselves almost certainly contained no sulfur, but many astronomers believe that the cloud layer below Jupiter's outer atmosphere does contain sulfur.** Since sulfur would have seeped into the outer atmosphere if comet fragments had penetrated this cloud layer, it is likely that some of the fragments were at least large enough to have passed through Jupiter's outer atmosphere without being burned up.
 - In the astronomer's argument, the two portions in **boldface** play which of the following roles?
- A. The first presents a circumstance for which the astronomer offers an explanation; the second is part of that explanation.
- B. The first acknowledges a consideration that weighs against the conclusion of the argument; the second is that conclusion.
- C. The first acknowledges a consideration that weighs against the conclusion of the argument; the second provides evidence in support of that conclusion.
- D. The first provides evidence in support of the conclusion of the argument; the second acknowledges a consideration that weighs against that conclusion.
- E. The first is a judgment advanced in support of the conclusion of the argument; the second is that conclusion.
- 16. Most of the world's supply of uranium currently comes from mines. It is possible to extract uranium from seawater, but the cost of doing so is greater than the price that uranium fetches on the world market. Therefore, until the cost of extracting uranium from seawater can somehow be reduced, this method of obtaining uranium is unlikely to be commercially viable. Which of the following would it be most useful to determine in evaluating the argument?
- A. Whether the uranium in deposits on land is rapidly being depleted
- B. Whether most uranium is used near where it is mined
- C. Whether there are any technological advances that show promise of reducing the cost of extracting uranium from seawater
- D. Whether the total amount of uranium in seawater is significantly greater than the total amount of uranium on land
- E. Whether uranium can be extracted from freshwater at a cost similar to the cost of extracting it from seawater

- 17. Urban air contains more sulfur dioxide than does rural air, and plants in cities typically grow more slowly than do plants in rural areas. In an experiment to see how much of the difference in growth is due to sulfur dioxide, classes in an urban and a rural school grew plants in greenhouses at their schools and filtered the greenhouse air to eliminate sulfur dioxide. Plants in the urban greenhouse grew more slowly than those in the rural greenhouse. Which of the following, if true, would it be most important to take into account in evaluating the result?
- A. The urban school was located in a part of the city in which levels of sulfur dioxide in the air were usually far lower than is typical for urban areas.
- B. At both schools, the plants in the greenhouses grew much more quickly than did plants planted outdoors in plots near the greenhouses.
- C. The urban class conducting the experiment was larger than the rural class conducting the experiment.
- D. Heavy vehicular traffic such as is found in cities constantly deposits grime on greenhouse windows, reducing the amount of light that reaches the plants inside.
- E. Because of the higher levels of sulfur dioxide in the air at the urban school, the air filters for the urban school's greenhouse were changed more frequently than were those at the rural school.
- 18. Many small roads do not have painted markings along their edges. Clear edge markings would make it easier for drivers to see upcoming curves and to judge the car's position on the road, particularly when visibility is poor, and would therefore seem to be a useful contribution to road safety. However, after Greatwater County painted edge markings on all its narrow, winding roads, the annual accident rate along those roads actually increased slightly. Which of the following, if true, most helps to explain the increase in accident rate?
- A. Greatwater County has an unusually high proportion of narrow, winding roads.
- B. In bad weather it can be nearly as difficult for drivers to see the road as it is at night.
- C. Prior to the painting of the edge markings, Greatwater County's narrow, winding roads already had a somewhat higher accident rate than other Greatwater County roads.
- D. Many of the accidents on narrow, winding roads involve a single vehicle veering off the road, rather than the collision of two vehicles.
- E. After the markings were painted on the roads, many drivers who had gone out of their way to avoid driving on those roads at night no longer did so.
- 19. Gortland has long been narrowly self-sufficient in both grain and meat. However, as per capita income in Gortland has risen toward the world average, per capita consumption of meat has also risen toward the world average, and it takes several pounds of grain to produce one pound of meat. Therefore, since per capita income continues to rise, whereas domestic grain production will not increase, Gortland will soon have to import either grain or meat or both. Which of the following is an assumption on which the argument depends?
- A. The total acreage devoted to grain production in Gortland will soon decrease.
- B. Importing either grain or meat will not result in a significantly higher percentage of Gortlanders' incomes being spent on food than is currently the case.
- C. The per capita consumption of meat in Gortland is increasing at roughly the same rate across all income levels.
- D. The per capita income of meat producers in Gortland is rising faster than the per capita income of grain producers.
- E. People in Gortland who increase their consumption of meat will not radically decrease their consumption of grain.
- 20. For years the beautiful Renaissance buildings in Palitito have been damaged by exhaust from the many tour buses that come to the city. There has been little parking space, so most buses have idled at the curb during each stop on their tour, and idling produces as much exhaust as driving. The city has now provided parking that accommodates a third of the tour buses, so damage to Palitito's buildings from the buses' exhaust will diminish significantly. Which of the following, if true, most strongly supports the argument?
- A. The exhaust from Palitito's few automobiles is not a significant threat to Palitito's buildings.
- B. Palitito's Renaissance buildings are not threatened by pollution other than engine exhaust.
- C. Tour buses typically spend less than one-quarter of the time they are in Palitito transporting passengers from one site to another.
- D. More tourists come to Palitito by tour bus than by any other single means of transportation.
- E. Some of the tour buses that are unable to find parking drive around Palitito while their passengers are visiting a site.

- 21. Traces of cultivated emmer wheat have been found among the earliest agricultural remains of many archaeological sites in Europe and Asia. The only place where the wild form of emmer wheat has been found growing is a relatively narrow strip of southwest Asia. Since the oldest remains of cultivated emmer wheat yet found are from village sites in the same narrow strip, it is clear that emmer wheat was first domesticated somewhere in that strip. Which of the following, if true, most strengthens the argument?
- A. The present-day distribution of another wild wheat, einkorn, which was also domesticated early in the development of agriculture, covers a much larger area of southwest Asia.
- B. Modern experiments show that wild emmer wheat can easily be domesticated so as to yield nearly as well as traditionally domestic strains.
- C. At the time when emmer wheat was first cultivated, it was the most nutritious of all the varieties of grain that were then cultivated.
- D. In the region containing the strip where wild emmer wheat has been found, climatic conditions have changed very little since before the development of agriculture.
- E. It is very difficult, without genetic testing, to differentiate the wild form of emmer wheat from a closely related wild wheat that also grows in southwest Asia.
- 22. In the late 1980s, the population of sea otters in the North Pacific began to decline. There are two plausible explanations for the decline: predation, possibly by killer whales, or disease. Of these two, disease is the more likely, since a concurrent sharp decline in populations of seals and sea lions is believed to have been caused by disease, and diseases that infect these creatures are likely to be able to infect sea otters also. **Which of the following, if true, most seriously weakens the reasoning?**
- A. Killer whales in the North Pacific usually prey on seals and sea lions but will, when this food source is scarce, seek out other prey.
- B. There is no indication that the sea otter population at any North Pacific location declined in the 1980s because of substantial numbers of sea otters migrating to other locations.
- C. Along the Pacific coast of North America in the 1980s, sea otters were absent from many locations where they had been relatively common in former times.
- D. Following the decline in the population of the sea otters, there was an increase in the population of sea urchins, which are sea otters' main food source.
- E. The North Pacific populations of seals and sea lions cover a wider geographic area than does the population of sea otters.
- 23. From 1978 to 1988, beverage containers accounted for a steadily decreasing percentage of the total weight of household garbage in the United States. The increasingly widespread practice of recycling aluminum and glass was responsible for most of this decline. However, although aluminum recycling was more widely practiced in this period than glass recycling, it was found that the weight of glass bottles in household garbage declined by a greater percentage than the weight of aluminum cans. Which of the following, if true of the United States in the period 1978 to 1988, most helps to account for the finding?
- A. Glass bottles are significantly heavier than aluminum cans of comparable size.
- B. Recycled aluminum cans were almost all beverage containers, but a significant fraction of the recycled glass bottles had contained products other than beverages.
- C. Manufacturers replaced many glass bottles, but few aluminum cans, with plastic containers.
- D. The total weight of glass bottles purchased by households increased at a slightly faster rate than the total weight of aluminum cans.
- E. In many areas, glass bottles had to be sorted by color of the glass before being recycled, whereas aluminum cans required no sorting.
- 24. Tiger beetles are such fast runners that they can capture virtually any nonflying insect. However, when running toward an insect, the beetles intermittently stop, and then, a moment later, resume their attack. Perhaps they cannot maintain their pace and must pause for a moment's rest; but an alternative hypothesis is that while running tiger beetles are unable to process the resulting rapidly changing visual information, and so quickly go blind and stop. Which of the following, if discovered in experiments using artificially moved prey insects, would support one of the two hypotheses and undermine the other?
- A. When a prey insect is moved directly toward a beetle that has been chasing it, the beetle immediately turns and runs away without its usual intermittent stopping.
- B. In pursuing a moving insect, the beetles usually respond immediately to changes in the insect's direction, and pause equally frequently whether the chase is up or down an incline.
- C. The beetles maintain a fixed time interval between pauses, although when an insect that had been stationary begins to flee, the beetle increases its speed after its next pause.
- D. If, when a beetle pauses, it has not gained on the insect it is pursuing, the beetle generally ends its pursuit.
- E. When an obstacle is suddenly introduced just in front of running beetles, the beetles sometimes stop immediately, but they never respond by running around the barrier.

- 25. Twelve years ago and again five years ago, there were extended periods when the Darfir Republic's currency, the pundra, was weak: its value was unusually low relative to the world's most stable currencies. Both times a weak pundra made Darfir's manufactured products a bargain on world markets, and Darfir's exports were up substantially. Now some politicians are saying that, in order to cause another similarly sized increase in exports, the government should allow the pundra to become weak again. Which of the following, if true, provides the government with the strongest grounds to doubt that the politicians' recommendation, if followed, will achieve its aim?
- A. Several of the politicians now recommending that the pundra be allowed to become weak made that same recommendation before each of the last two periods of currency weakness.
- B. After several decades of operating well below peak capacity, Darfir's manufacturing sector is now operating at near-peak levels.
- C. The economy of a country experiencing a rise in exports will become healthier only if the country's currency is strong or the rise in exports is significant.
- D. Those countries whose manufactured products compete with Darfir's on the world market all currently have stable currencies.
- E. A sharp improvement in the efficiency of Darfir's manufacturing plants would make Darfir's products a bargain on world markets even without any weakening of the pundra relative to other currencies.
- 26. The population of Megacity, a sprawling metropolis in Remsland, has grown at a fairly steady rate for over a century. A hundred years ago, poor sanitation in the city caused high mortality rates among the city's inhabitants, and what fueled the population increase was immigration from rural villages. This immigration has continued and even increased. Moreover, in recent decades, city sanitation has improved enormously. Yet the city's population growth has not significantly accelerated. Which of the following, if true, most helps to explain why the city's population growth rate has not changed?
- A. Mortality rates that were associated with poor sanitation in Megacity a hundred years ago were orders of magnitude higher than are mortality rates associated with vehicular traffic, which is currently a major cause of death in the city.
- B. For several decades, Megacity, as distinct from the countryside, has had a steadily declining birth rate.
- C. Cities smaller than Megacity have also experienced sustained population growth.
- D. The great majority of immigrants to Remsland settle in Megacity, at least initially.
- E. Megacity has long offered better employment prospects than most rural areas.
- 27. Plant scientists have used genetic engineering on seeds to produce crop plants that are highly resistant to insect damage. Unfortunately, the seeds themselves are quite expensive, and the plants require more fertilizer and water to grow well than normal ones. Thus, for most farmers the savings on pesticides would not compensate for the higher seed costs and the cost of additional fertilizer. However, since consumer demand for grains, fruits, and vegetables grown without the use of pesticides continues to rise, the use of genetically engineered seeds of this kind is likely to become widespread.
 - In the argument given, the two portions in **boldface** play which of the following roles?
- A. The first supplies a context for the argument; the second is the argument's main conclusion.
- B. The first introduces a development that the argument predicts will have a certain outcome; the second is a state of affairs that the argument denies will be part of that outcome.
- C. The first presents a development that the argument predicts will have a certain outcome; the second acknowledges a consideration that weighs against that prediction.
- D. The first provides evidence to support a prediction that the argument seeks to defend; the second is that prediction.
- E. The first and the second each provide evidence to support the argument's main conclusion.

- 28. First-time computer buyers buying PXC home computers typically buy models that cost much less and have a smaller profit margin per computer than do PXC computers bought by people replacing their computers with more powerful models. Last year PXC's profits from computer sales were substantially higher than the previous year, although about the same number of PXC computers were sold and the prices and profit margins for each computer model that PXC sells remained unchanged. If the statements above are true, which of the following is most strongly supported by them?
- A. PXC's competitors raised the prices on their computers last year, making PXC computers more attractive to first-time computer buyers.
- B. The number of people buying PXC computers who also bought PXC computer-related products, such as printers, was larger last year than the previous year.
- C. Among computer buyers who bought a PXC computer to replace their existing computer, the proportion who were replacing a computer made by a competitor of PXC was greater last year than the previous year.
- D. The proportion of PXC computers bought by first-time computer buyers was smaller last year than the previous year.
- E. PXC's production costs for its computers were lower last year than they had been the previous year.
- 29. To reduce the danger to life and property posed by major earthquakes, scientists have been investigating several techniques for giving advance warning of dangerous earthquakes. Since catfish swim erratically before earthquakes, some investigators have proposed monitoring catfish to predict dangerous earthquakes. Which of the following, if true, most seriously undermines the usefulness of the proposal?
- A. In Japan, which is subject to frequent earthquakes, the behavior of catfish has long been associated with earthquakes.
- B. Mechanical methods for detecting earthquakes have not proved effective.
- C. Tremors lead to the release of hydrogen sulfide gas into water, thereby causing various fish and shellfish to behave erratically.
- D. Careful construction can reduce the dangers posed by earthquakes.
- E. Even very slight, fleeting tremors cause catfish to swim erratically.
- 30. A city plans to attract new citizens with new housing and new facilities such as parks, recreation centers, and libraries. One component of the city's plan is to require that developers seeking permission to build this new housing provide these additional facilities at no cost to the city. Which of the following, if true, would point to a possible flaw in the city's plan?
- A. Developers would pass along their costs to the buyer, thereby raising the cost of housing units beyond the ability of likely purchasers to afford them.
- B. Light, nonpolluting industries have located in the area, offering more jobs and better-paying jobs than do the more-established industries in the area.
- C. Other towns and cities nearby have yet to embark on any comparable plans to attract new citizens.
- D. Most developers see the extra expense of providing municipal facilities as simply one of the many costs of doing business.
- E. Studies show that purchasers of new houses, especially first-time buyers, rank recreational resources as an important factor in deciding to buy a particular house.
- 31. Manufacturers issue cents-off coupons to get consumers to try their brand of product with the hope that the consumers who try their brand will switch their brand loyalty. So in the initial marketing of their new brand X, Hartman Industries should issue cents-off coupons, thereby attracting a large segment of potential consumers as loyal customers. Which of the following, if true, casts the most serious doubt on the likelihood that the marketing strategy recommended above will have the result that is claimed?
- A. Many consumers are unlikely to try new brands of products unless offered an inducement to do so.
- B. The consumers whose purchases are strongly influenced by cents-off coupons tend not to become loyal customers of any particular brand.
- C. Many grocery stores attract customers by doubling the face value of manufacturer's coupons.
- D. Typically less than one-third of the coupons issued by a manufacturer are redeemed by consumers.
- E. A marketing campaign that uses cents-off coupons is most effective when combined with a television advertising campaign.

- 32. **State spokesperson**: Many businesspeople who have not been to our state believe that we have an inadequate road system. Those people are mistaken, as is obvious from the fact that in each of the past six years, our state has spent more money per mile on road improvements than any other state. **Which of the following, if true, most seriously undermines the reasoning in the spokesperson's argument?**
- A. In the spokesperson's state, spending on road improvements has been increasing more slowly over the past six years than it has in several other states.
- B. Adequacy of a state's road system is generally less important to a businessperson considering doing business there than is the availability of qualified employees.
- C. Over the past six years, numerous businesses have left the spokesperson's state, but about as many businesses have moved into the state.
- D. In general, the number of miles of road in a state's road system depends on both the area and the population of the state.
- E. Only states with seriously inadequate road systems need to spend large amounts of money on road improvements.
- 33. When a caterpillar emerges from the egg on a tree branch, it immediately climbs upward until it finds a leaf bud to eat. Biologists thought that this behavior displayed an innate tendency to move in the direction opposite to the pull of gravity. In a recent experiment, a strong light source was placed at the bottom of a tree, and caterpillars, after hatching, climbed downward. Which of the following hypotheses is best supported by the statements given?
- A. Caterpillars have an innate tendency to move in the direction of gravity.
- B. Newly hatched caterpillars are unable to see in the dark.
- C. Newly hatched caterpillars move towards the strongest light source in the environment.
- D. Newly hatched caterpillars move toward the leaf bud nearest to them.
- E. The eyes of newly hatched caterpillars become less sensitive to light over time.
- 34. For several years, per capita expenditure on prescription drugs in Voronia rose by fifteen percent or more annually. In order to curb these dramatic increases, the ministry of health prohibited drug manufacturers from raising any of their products' prices. Even though use of prescription drugs did not expand after this price freeze, per capita expenditure for prescription drugs continued to increase by a substantial percentage each year. Which of the following, if true, most helps to explain why the ministry's action did not achieve its goal?
- A. After price increases were prohibited, drug manufacturers concentrated on producing new medications to replace existing products.
- B. The population of Voronia rose steadily throughout the period.
- C. Improvements in manufacturing processes enabled drug manufacturers to maintain high profit levels on drugs despite the price freeze.
- D. In addition to imposing a price freeze, the government encouraged doctors to prescribe generic versions of common drugs instead of the more expensive brand-name versions.
- E. After price increases were prohibited, some foreign manufacturers of expensive drugs ceased marketing them in Voronia.

35. Which of the following most logically completes the argument?

The last members of a now-extinct species of a European wild deer called the giant deer lived in Ireland about 16,000 years ago. Prehistoric cave paintings in France depict this animal as having a large hump on its back. Fossils of this animal, however, do not show any hump. Nevertheless, there is no reason to conclude that the cave paintings are therefore inaccurate in this regard, since ______.

- A. some prehistoric cave paintings in France also depict other animals as having a hump
- B. fossils of the giant deer are much more common in Ireland than in France
- C. animal humps are composed of fatty tissue, which does not fossilize
- D. the cave paintings of the giant deer were painted well before 16,000 years ago
- E. only one currently existing species of deer has any anatomical feature that even remotely resembles a hump

- 36. Outsourcing is the practice of obtaining from an independent supplier a product or service that a company has previously provided for itself. Vernon, Inc., a small manufacturing company that has in recent years experienced a decline in its profits, plans to boost its profits by outsourcing those parts of its business that independent suppliers can provide at lower cost than Vernon can itself. Which of the following, if true, most strongly supports the prediction that Vernon's plan will achieve its goal?
- A. Among the parts of its business that Vernon does not plan to outsource are some that require standards of accuracy too high for most independent suppliers to provide at lower cost than Vernon can.
- B. Vernon itself acts as an independent supplier of specialized hardware items to certain manufacturers that formerly made those items themselves.
- C. Relatively few manufacturers that start as independent suppliers have been able to expand their business and become direct competitors of the companies they once supplied.
- D. Vernon plans to select the independent suppliers it will use on the basis of submitted bids.
- E. Attending to certain tasks that Vernon performs relatively inefficiently has taken up much of the time and effort of top managers whose time would have been better spent attending to Vernon's core business.
- 37. Capuchin monkeys in Venezuela often rub a certain type of millipede into their fur. Secretions of these millipedes have been shown to contain two chemicals that are potent mosquito repellents, and mosquitoes carry parasites that debilitate the capuchins. The rubbing behavior is rare except during the rainy season, when mosquito populations are at their peak. Therefore, the monkeys probably rub the millipedes into their fur because doing so helps protect them against mosquitoes. Which of the following would it be most useful to determine in order to evaluate the argument?
- A. Whether the two chemicals provide any protection for the millipedes against their own predators
- B. Whether the type of millipede used by the capuchin monkeys in Venezuela is found in other parts of the world
- C. Whether animals other than capuchins rub insects of any kind into their fur
- D. Whether the only time the millipedes are readily available to the capuchins is during the rainy season
- E. Whether secretions of any other insects accessible to the capuchins contain chemicals that repel mosquitoes

38. Which of the following most logically completes the argument below?

When interest rates are high, insurance companies reduce the premiums they charge for many kinds of insurance policies. The reason is that insurance companies want to take in as much money as possible in premiums so that they can invest the money at high rates of interest. And premium reductions help achieve this objective, since ______.

- A. interest rates are likely to decrease when large amounts of money are available for loans
- B. smaller insurance companies are not able to amass enough money to take advantage of investing at high interest rates
- C. insurance companies can sell many more insurance policies if they charge lower premiums than they would if they left premiums unchanged
- D. an increase in the number of policies sold eventually leads to an increase in the number of claims that an insurance company has to pay
- E. the number of claims that insurance companies pay increases at a higher rate than does the number of policies that the insurance companies can sell at the lower premiums
- 39. After its customers complained about being pressured to buy unneeded insurance, an insurance agency stopped rewarding its agents for high sales volume and instead gave them bonuses for high levels of customer satisfaction. Under this new plan, both customer satisfaction and the insurance agency's sales increased. Each of the following, if true, helps to explain how the change in incentives for agents could have resulted in increased sales EXCEPT:
- A. Customers were so pleased that the insurance agency had responded to their complaints that they recommended the agency to their friends.
- B. Agents listened more closely to customers of long standing and were able to sell them additional insurance policies that met new needs.
- C. Agents more frequently postponed completing the attendant paperwork even after the terms for an insurance policy were settled to the satisfaction of the client.
- D. Dissatisfied customers of other agencies, attracted by the reports of the change in agency policy, became customers of the agency.
- E. Having come to trust the increased judiciousness of the agents' recommendations, customers approached the agency to discuss and ultimately to buy more supplementary insurance than they previously had bought under pressure.

- 40. **Columnist**: People should avoid using a certain artificial fat that has been touted as a resource for those whose medical advisers have advised them to reduce their fat intake. Although the artificial fat, which can be used in place of fat in food preparation, has none of the negative health effects of fat, it does have a serious drawback: it absorbs certain essential vitamins, thereby preventing them from being used by the body. **In evaluating the columnist's position, it would be most useful to determine which of the following?**
- A. Whether increasing one's intake of the vitamins can compensate for the effects of the artificial fat
- B. Whether the vitamins that the artificial fat absorbs are present in foods that contain the fat
- C. Whether having an extremely low fat intake for an extended period can endanger the health
- D. Whether there are any foods that cannot be prepared using the artificial fat as a substitute for other fats
- E. Whether people are generally able to detect differences in taste between foods prepared using the artificial fat and foods that are similar except for the use of other fats
- 41. In the two years following the unification of Germany in 1989, the number of cars owned by residents of East Germany and the total distance traveled by cars in East Germany both increased by about 40 percent. In those two years, however, the number of East German residents killed each year as car occupants in traffic accidents increased by about 300 percent. Which of the following, if true, most helps to explain the disproportionate increase in traffic fatalities?
- A. The average number of passengers per car was higher in the years before unification than it was in the two years after.
- B. After unification, many people who had been living in East Germany relocated to West Germany.
- C. After unification, a smaller proportion of the cars being purchased by East German residents were used vehicles.
- D. Drivers who had driven little or not at all before 1989 accounted for much of the increase in the total distance traveled by cars.
- E. Over the same two-year period in East Germany, other road users, such as motorcyclists, bicyclists, and pedestrians, experienced only small increases in traffic fatalities.
- 42. **Editorial**: Regulations recently imposed by the government of Risemia call for unprecedented reductions in the amounts of pollutants manufacturers are allowed to discharge into the environment. It will take costly new pollution control equipment requiring expensive maintenance to comply with these regulations. Resultant price increases for Risemian manufactured goods will lead to the loss of some export markets. Clearly, therefore, annual exports of Risemian manufactured goods will in the future occur at diminished levels. **Which of the following, if true, most seriously weakens the argument in the editorial?**
- A. The need to comply with the new regulations will stimulate the development within Risemia of new pollution control equipment for which a strong worldwide demand is likely to emerge.
- B. The proposed regulations include a schedule of fines for noncompliance that escalate steeply in cases of repeated noncompliance.
- C. Savings from utilizing the chemicals captured by the pollution control equipment will remain far below the cost of maintaining the equipment.
- D. By international standards, the levels of pollutants currently emitted by some of Risemia's manufacturing plants are not considered excessive.
- E. The stockholders of most of Risemia's manufacturing corporations exert substantial pressure on the corporations to comply with environmental laws.
- 43. Paint on a new airliner is usually applied in two stages: first, a coat of primer, and then a top coat. A new process requires no primer, but instead uses two layers of the same newly developed coating, with each layer of the new coating having the same thickness and weight as a traditional top coat. Using the new process instead of the old process increases the price of a new aircraft considerably. Which of the following, if true, most strongly indicates that it is in an airline's long-term economic interest to purchase new airliners painted using the new process rather than the old process?
- A. Although most new airliners are still painted using the old process, aircraft manufacturers now offer a purchaser of any new airliner the option of having it painted using the new process instead.
- B. A layer of primer on an airliner weighs more than a layer of the new coating would by an amount large enough to make a difference to that airliner's load-bearing capacity.
- C. A single layer of the new coating provides the aluminum skin of the airliner with less protection against corrosion than does a layer of primer of the usual thickness.
- D. Unlike the old process, the new process was originally invented for use on spacecraft, which are subject to extremes of temperature to which airliners are never exposed.
- E. Because the new coating has a viscosity similar to that of a traditional top coat, aircraft manufacturers can apply it using the same equipment as is used for a traditional top coat.

- 44. In countries in which new life-sustaining drugs cannot be patented, such drugs are sold at widely affordable prices; those same drugs, where patented, command premium prices because the patents shield patent-holding manufacturers from competitors. These facts show that future access to new life-sustaining drugs can be improved if the practice of granting patents on newly developed life-sustaining drugs were to be abolished everywhere. Which of the following, if true, most seriously weakens the argument?
- A. In countries in which life-sustaining drugs cannot be patented, their manufacture is nevertheless a profitable enterprise.
- B. Countries that do not currently grant patents on life-sustaining drugs are, for the most part, countries with large populations.
- C. In some countries specific processes for the manufacture of pharmaceutical drugs can be patented even in cases in which the drugs themselves cannot be patented.
- D. Pharmaceutical companies can afford the research that goes into the development of new drugs only if patents allow them to earn high profits.
- E. Countries that grant patents on life-sustaining drugs almost always ban their importation from countries that do not grant such patents.
- 45. A major impediment to wide acceptance of electric vehicles even on the part of people who use their cars almost exclusively for commuting is the inability to use electric vehicles for occasional extended trips. In an attempt to make purchasing electric vehicles more attractive to commuters, one electric vehicle producer is planning to offer customers three days free rental of a conventional car for every 1,000 miles that they drive their electric vehicle. Which of the following, if true, most threatens the plan's prospects for success?
- A. Many electric vehicles that are used for commercial purposes are not needed for extended trips.
- B. Because a majority of commuters drive at least 100 miles a week, the cost to the producer of making good the offer would add considerably to the already high price of electric vehicles.
- C. The relatively long time it takes to recharge the battery of an electric vehicle can easily be fitted into the regular patterns of car use characteristic of commuters.
- D. Although electric vehicles are essentially emission-free in actual use, generating the electricity necessary for charging an electric vehicle's battery can burden the environment.
- E. Some family vehicles are used primarily not for commuting but for making short local trips, such as to do errands.
- 46. Archaeologists in Michigan have excavated a Native American camp near Dumaw Creek. Radiocarbon dating of animal bones found at the site indicates that the camp dates from some time between 1605 and 1755. However, the camp probably dates to no later than 1630, since no European trade goods were found at the site, and European traders were active in the region from the 1620's onward. Which of the following, if true, most strengthens the argument?
- A. Due to trade among Native Americans, some European trade goods would have reached the area before the European traders themselves did.
- B. At all camps in the region that have been reliably dated to the late 1620's, remains of European trade goods have been found.
- C. The first European trade goods to reach the area would have been considered especially valuable and preserved as much as possible from loss or destruction.
- D. The first European traders in the area followed soon after the first European explorers.
- E. The site is that of a temporary camp that would have been used seasonally for a few years and then abandoned.
- 47. Automobile emissions are a significant source of air pollutants, and cars over five years old typically generate significantly greater amounts of pollutants than newer cars. In Torinia, which has recently built its first automobile manufacturing plant, most cars are over five years old. Aiming to boost Torinia's economy and reduce air pollution, the government plans to introduce incentives for Torinians to scrap their old cars every five years and replace them with new ones. Which of the following, if true, most seriously undermines the likelihood that the planned incentives, if implemented, will achieve both of the cited aims?
- A. Without the implementation of the planned incentives, most Torinians who own an old car would be unlikely to buy a new car.
- B. Torinia's automobile plant manufactures car models that typically generate smaller amounts of air pollutants than most similarly sized car models manufactured elsewhere.
- C. The new cars produced in Torinia are not likely to be exported to other countries.
- D. The largest source of atmospheric pollutants in Torinia is not automobile emissions, but emissions from power plants.
- E. The manufacture and the scrapping of cars each generate significant amounts of air pollutants.

- 48. Parasitic wasps lay their eggs directly into the eggs of various host insects in exactly the right numbers for any suitable size of host egg. If they laid too many eggs in a host egg, the developing wasp larvae would compete with each other to the death for nutrients and space. If too few eggs were laid, portions of the host egg would decay, killing the wasp larvae. Which of the following conclusions can properly be drawn from the information above?
- A. The size of the smallest host egg that a wasp could theoretically parasitize can be determined from the wasp's egg-laying behavior.
- B. Host insects lack any effective defenses against the form of predation practiced by parasitic wasps.
- C. Parasitic wasps learn from experience how many eggs to lay into the eggs of different host species.
- D. Failure to lay enough eggs would lead to the death of the developing wasp larvae more quickly than would laying too many eggs.
- E. Parasitic wasps use visual clues to calculate the size of a host egg.
- 49. An overly centralized economy, not the changes in the climate, is responsible for the poor agricultural production in Country X since its new government came to power. Neighboring Country Y has experienced the same climatic conditions, but while agricultural production has been falling in Country X, it has been rising in Country Y. Which of the following, if true, would most weaken the argument above?
- A. Industrial production also is declining in Country X.
- B. Whereas Country Y is landlocked, Country X has a major seaport.
- C. Both Country X and Country Y have been experiencing drought conditions.
- D. The crops that have always been grown in Country X are different from those that have always been grown in Country Y.
- E. Country X's new government instituted a centralized economy with the intention of ensuring an equitable distribution of goods.
- 50. Generally scientists enter their field with the goal of doing important new research and accept as their colleagues those with similar motivation. Therefore, when any scientist wins renown as an expounder of science to general audiences, most other scientists conclude that this popularizer should no longer be regarded as a true colleague. The explanation offered above for the low esteem in which scientific popularizers are held by research scientists assumes that
- A. serious scientific research is not a solitary activity, but relies on active cooperation among a group of colleagues
- B. research scientists tend not to regard as colleagues those scientists whose renown they envy
- C. a scientist can become a famous popularizer without having completed any important research
- D. research scientists believe that those who are well known as popularizers of science are not motivated to do important new research
- E. no important new research can be accessible to or accurately assessed by those who are not themselves scientists
- 51. A company's two divisions performed with remarkable consistency over the past three years: in each of those years, the pharmaceuticals division has accounted for roughly 20 percent of dollar sales and 40 percent of profits, and the chemicals division for the balance. Which of the following can properly be inferred regarding the past three years from the statement above?
- A. Total dollar sales for each of the company's divisions have remained roughly constant.
- B. The pharmaceuticals division has faced stiffer competition in its markets than has the chemicals division.
- C. The chemicals division has realized lower profits per dollar of sales than has the pharmaceuticals division.
- D. The product mix offered by each of the company's divisions has remained unchanged.
- E. Highly profitable products accounted for a higher percentage of the chemicals division's sales than of those of the pharmaceuticals division.

- 52. The technological conservatism of bicycle manufacturers is a reflection of the kinds of demand they are trying to meet. The only cyclists seriously interested in innovation and willing to pay for it are bicycle racers. Therefore, innovation in bicycle technology is limited by what authorities will accept as standard for purposes of competition in bicycle races. Which of the following is an assumption made in drawing the conclusion above?
- A. The market for cheap, traditional bicycles cannot expand unless the market for high-performance competition bicycles expands.
- B. High-performance bicycles are likely to be improved more as a result of technological innovations developed in small workshops than as a result of technological innovations developed in major manufacturing concerns.
- C. Bicycle racers do not generate a strong demand for innovations that fall outside what is officially recognized as standard for purposes of competition.
- D. The technological conservatism of bicycle manufacturers results primarily from their desire to manufacture a product that can be sold without being altered to suit different national markets.
- E. The authorities who set standards for high-performance bicycle racing do not keep informed about innovative bicycle design.
- 53. When a polygraph test is judged inconclusive, this is no reflection on the examinee. Rather, such a judgment means that the test has failed to show whether the examinee was truthful or untruthful. Nevertheless, employers will sometimes refuse to hire a job applicant because of an inconclusive polygraph test result. Which of the following conclusions can most properly be drawn from the information above?
- A. Most examinees with inconclusive polygraph test results are in fact untruthful.
- B. Polygraph tests should not be used by employers in the consideration of job applicants.
- C. An inconclusive polygraph test result is sometimes unfairly held against the examinee.
- D. A polygraph test indicating that an examinee is untruthful can sometimes be mistaken.
- E. Some employers have refused to consider the results of polygraph tests when evaluating job applicants.
- 54. Male bowerbirds construct elaborately decorated nests, or bowers. Basing their judgment on the fact that different local populations of bowerbirds of the same species build bowers that exhibit different building and decorative styles, researchers have concluded that the bowerbirds' building styles are a culturally acquired, rather than a genetically transmitted, trait. Which of the following, if true, would most strengthen the conclusion drawn by the researchers?
- A. There are more common characteristics than there are differences among the bowerbuilding styles of the local bowerbird population that has been studied most extensively.
- B. Young male bowerbirds are inept at bowerbuilding and apparently spend years watching their elders before becoming accomplished in the local bower style.
- C. The bowers of one species of bowerbird lack the towers and ornamentation characteristic of the bowers of most other species of bowerbird.
- D. Bowerbirds are found only in New Guinea and Australia, where local populations of the birds apparently seldom have contact with one another.
- E. It is well known that the song dialects of some songbirds are learned rather than transmitted genetically.
- 55. According to the Tristate Transportation Authority, making certain improvements to the main commuter rail line would increase ridership dramatically. The authority plans to finance these improvements over the course of five years by raising automobile tolls on the two highway bridges along the route the rail line serves. Although the proposed improvements are indeed needed, the authority's plan for securing the necessary funds should be rejected because it would unfairly force drivers to absorb the entire cost of something from which they receive no benefit. Which of the following, if true, would cast the most doubt on the effectiveness of the authority's plan to finance the proposed improvements by increasing bridge tolls?
- A. Before the authority increases tolls on any of the area bridges, it is required by law to hold public hearings at which objections to the proposed increase can be raised.
- B. Whenever bridge tolls are increased, the authority must pay a private contractor to adjust the automated toll-collecting machines.
- C. Between the time a proposed toll increase is announced and the time the increase is actually put into effect, many commuters buy more tokens than usual to postpone the effects of the increase.
- D. When tolls were last increased on the two bridges in question, almost 20 percent of the regular commuter traffic switched to a slightly longer alternative route that has since been improved.
- E. The chairman of the authority is a member of the Tristate Automobile Club that has registered strong opposition to the proposed toll increase.

- 56. Crops can be traded on the futures market before they are harvested. If a poor corn harvest is predicted, prices of corn futures rise; if a bountiful corn harvest is predicted, prices of corn futures fall. This morning meteorologists are predicting much-needed rain for the corn-growing region starting tomorrow. Therefore, since adequate moisture is essential for the current crop's survival, prices of corn futures will fall sharply today. Which of the following, if true, most weakens the argument above?
- A. Corn that does not receive adequate moisture during its critical pollination stage will not produce a bountiful harvest.
- B. Futures prices for corn have been fluctuating more dramatically this season than last season.
- C. The rain that meteorologists predicted for tomorrow is expected to extend well beyond the corn-growing region.
- D. Agriculture experts announced today that a disease that has devastated some of the corn crop will spread widely before the end of the growing season.
- E. Most people who trade in corn futures rarely take physical possession of the corn they trade.
- 57. **Roland**: The alarming fact is that 90 percent of the people in this country now report that they know someone who is unemployed.

Sharon: But a normal, moderate level of unemployment is 5 percent, with 1 out of 20 workers unemployed. So at any given time if a person knows approximately 50 workers, 1 or more will very likely be unemployed.

Sharon's argument is structured to lead to which of the following as a conclusion?

- A. The fact that 90% of the people know someone who is unemployed is not an indication that unemployment is abnormally high.
- B. The current level of unemployment is not moderate.
- C. If at least 5% of workers are unemployed, the result of questioning a representative group of people cannot be the percentage Roland cites.
- D. It is unlikely that the people whose statements Roland cites are giving accurate reports.
- E. If an unemployment figure is given as a certain percent, the actual percentage of those without jobs is even higher.
- 58. **Roland**: The alarming fact is that 90 percent of the people in this country now report that they know someone who is unemployed.

Sharon: But a normal, moderate level of unemployment is 5 percent, with 1 out of 20 workers unemployed. So at any given time if a person knows approximately 50 workers, 1 or more will very likely be unemployed.

Sharon's argument relies on the assumption that

- A. normal levels of unemployment are rarely exceeded
- B. unemployment is not normally concentrated in geographically isolated segments of the population
- C. the number of people who each know someone who is unemployed is always higher than 90% of the population
- D. Roland is not consciously distorting the statistics he presents
- E. knowledge that a personal acquaintance is unemployed generates more fear of losing one's job than does knowledge of unemployment statistics
- 59. A certain mayor has proposed a fee of five dollars per day on private vehicles entering the city, claiming that the fee will alleviate the city's traffic congestion. The mayor reasons that, since the fee will exceed the cost of round-trip bus fare from many nearby points, many people will switch from using their cars to using the bus.

 Which of the following statements, if true, provides the best evidence that the mayor's reasoning is flawed?
- A. Projected increases in the price of gasoline will increase the cost of taking a private vehicle into the city.
- B. The cost of parking fees already makes it considerably more expensive for most people to take a private vehicle into the city than to take a bus.
- C. Most of the people currently riding the bus do not own private vehicles.
- D. Many commuters opposing the mayor's plan have indicated that they would rather endure traffic congestion than pay a five-dollar-per day fee.
- E. During the average workday, private vehicles owned and operated by people living within the city account for twenty percent of the city's traffic congestion.

- 60. Because no employee wants to be associated with bad news in the eyes of a superior, information about serious problems at lower levels is progressively softened and distorted as it goes up each step in the management hierarchy. The chief executive is, therefore, less well informed about problems at lower levels than are his or her subordinates at those levels. **The conclusion drawn above is based on the assumption that**
- A. problems should be solved at the level in the management hierarchy at which they occur
- B. employees should be rewarded for accurately reporting problems to their superiors
- C. problem-solving ability is more important at higher levels than it is at lower levels of the management hierarchy
- D. chief executives obtain information about problems at lower levels from no source other than their subordinates
- E. some employees are more concerned about truth than about the way they are perceived by their superiors

61. Which of the following best completes the passage below?

At a recent conference on environmental threats to the North Sea, most participating countries favored uniform controls on the quality of effluents, whether or not specific environmental damage could be attributed to a particular source of effluent. What must, of course, be shown, in order to avoid excessively restrictive controls, is that

- A. any uniform controls that are adopted are likely to be implemented without delay
- B. any substance to be made subject to controls can actually cause environmental damage
- C. the countries favoring uniform controls are those generating the largest quantities of effluents
- D. all of any given pollutant that is to be controlled actually reaches the North Sea at present
- E. environmental damage already inflicted on the North Sea is reversible
- 62. The interview is an essential part of a successful hiring program because, with it, job applicants who have personalities that are unsuited to the requirements of the job will be eliminated from consideration. **The argument above logically depends on which of the following assumptions?**
- A. A hiring program will be successful if it includes interviews.
- B. The interview is a more important part of a successful hiring program than is the development of a job description.
- C. Interviewers can accurately identify applicants whose personalities are unsuited to the requirements of the job.
- D. The only purpose of an interview is to evaluate whether job applicants' personalities are suited to the requirements of the job.
- E. The fit of job applicants' personalities to the requirements of the job was once the most important factor in making hiring decisions.
- 63. Companies O and P each have the same number of employees who work the same number of hours per week. According to records maintained by each company, the employees of Company O had fewer job-related accidents last year than did the employees of Company P. Therefore, employees of Company O are less likely to have job-related accidents than are employees of Company P. Which of the following, if true, would most weaken the conclusion?
- A. The employees of Company P lost more time at work due to job-related accidents than did the employees of Company O.
- B. Company P considered more types of accidents to be job-related than did Company O.
- C. The employees of Company P were sick more often than were the employees of Company O.
- D. Several employees of Company O each had more than one job-related accident.
- E. The majority of job-related accidents at Company O involved a single machine.
- 64. Adult female rats who have never before encountered rat pups will start to show maternal behaviors after being confined with a pup for about seven days. This period can be considerably shortened by disabling the female's sense of smell or by removing the scent-producing glands of the pup. Which of the following hypotheses best explains the contrast described above?
- A. The sense of smell in adult female rats is more acute than that in rat pups.
- B. The amount of scent produced by rat pups increases when they are in the presence of a female rat that did not bear them.
- C. Female rats that have given birth are more affected by olfactory cues than are female rats that have never given birth.
- D. A female rat that has given birth shows maternal behavior toward rat pups that she did not bear more quickly than does a female rat that has never given birth.
- E. The development of a female rat's maternal interest in a rat pup that she did not bear is inhibited by the odor of the pup.

- 65. Sales of telephones have increased dramatically over the last year. In order to take advantage of this increase, Mammoth Industries plans to expand production of its own model of telephone, while continuing its already very extensive advertising of this product. Which of the following, if true, provides most support for the view that Mammoth Industries cannot increase its sales of telephones by adopting the plan outlined above?
- A. Although it sells all of the telephones that it produces, Mammoth Industries' share of all telephone sales has declined over the last year.
- B. Mammoth Industries' average inventory of telephones awaiting shipment to retailers has declined slightly over the last year.
- C. Advertising has made the brand name of Mammoth Industries' telephones widely known, but few consumers know that Mammoth Industries owns this brand.
- D. Mammoth Industries' telephone is one of three brands of telephone that have together accounted for the bulk of the last year's increase in sales.
- E. Despite a slight decline in the retail price, sales of Mammoth Industries' telephones have fallen in the last year.
- 66. Bank depositors in the United States are all financially protected against bank failure because the government insures all individuals' bank deposits. An economist argues that this insurance is partly responsible for the high rate of bank failures, since it removes from depositors any financial incentive to find out whether the bank that holds their money is secure against failure. If depositors were more selective, then banks would need to be secure in order to compete for depositors' money. The economist's argument makes which of the following assumptions?
- A. Bank failures are caused when big borrowers default on loan repayments.
- B. A significant proportion of depositors maintain accounts at several different banks.
- C. The more a depositor has to deposit, the more careful he or she tends to be in selecting a bank.
- D. The difference in the interest rates paid to depositors by different banks is not a significant factor in bank failures.
- E. Potential depositors are able to determine which banks are secure against failure.
- 67. A drug that is highly effective in treating many types of infection can, at present, be obtained only from the bark of the ibora, a tree that is quite rare in the wild. It takes the bark of 5,000 trees to make one kilogram of the drug. It follows, therefore, that continued production of the drug must inevitably lead to the ibora's extinction. Which of the following, if true, most seriously weakens the argument above?
- A. The drug made from ibora bark is dispensed to doctors from a central authority.
- B. The drug made from ibora bark is expensive to produce.
- C. The leaves of the ibora are used in a number of medical products.
- D. The ibora can be propagated from cuttings and grown under cultivation.
- E. The ibora generally grows in largely inaccessible places.
- 68. Manufacturers sometimes discount the price of a product to retailers for a promotion period when the product is advertised to consumers. Such promotions often result in a dramatic increase in amount of product sold by the manufacturers to retailers. Nevertheless, the manufacturers could often make more profit by not holding the promotions. Which of the following, if true, most strongly supports the claim above about the manufacturers' profit?
- A. The amount of discount generally offered by manufacturers to retailers is carefully calculated to represent the minimum needed to draw consumers' attention to the product.
- B. For many consumer products the period of advertising discounted prices to consumers is about a week, not sufficiently long for consumers to become used to the sale price.
- C. For products that are not newly introduced, the purpose of such promotions is to keep the products in the minds of consumers and to attract consumers who are currently using competing products.
- D. During such a promotion retailers tend to accumulate in their warehouses inventory bought at discount; they then sell much of it later at their regular price.
- E. If a manufacturer fails to offer such promotions but its competitor offers them, that competitor will tend to attract consumers away from the manufacturer's product.

- 69. Excavation of the ancient city of Kourion on the island of Cyprus revealed a pattern of debris and collapsed buildings typical of towns devastated by earthquakes. Archaeologists have hypothesized that the destruction was due to a major earthquake known to have occurred near the island in A.D. 365. **Which of the following, if true, most strongly supports the archaeologists' hypothesis?**
- A. Bronze ceremonial drinking vessels that are often found in graves dating from years preceding and following A.D. 365 were also found in several graves near Kourion.
- B. No coins minted after A.D. 365 were found in Kourion, but coins minted before that year were found in abundance.
- C. Most modern histories of Cyprus mention that an earthquake occurred near the island in A.D. 365.
- D. Several small statues carved in styles current in Cyprus in the century between A.D. 300 and 400 were found in Kourion.
- E. Stone inscriptions in a form of the Greek alphabet that was definitely used in Cyprus after A.D. 365 were found in Kourion.
- 70. According to a review of 61 studies of patients suffering from severely debilitating depression, a large majority of the patients reported that missing a night's sleep immediately lifted their depression. Yet sleep-deprivation is not used to treat depression even though the conventional treatments, which use drugs and electric shocks, often have serious side effects. Which of the following, if true, best explains the fact that sleep-deprivation is not used as a treatment for depression?
- A. For a small percentage of depressed patients, missing a night's sleep induces a temporary sense of euphoria.
- B. Keeping depressed patients awake is more difficult than keeping awake people who are not depressed.
- C. Prolonged loss of sleep can lead to temporary impairment of judgment comparable to that induced by consuming several ounces of alcohol.
- D. The dramatic shifts in mood connected with sleep and wakefulness have not been traced to particular changes in brain chemistry.
- E. Depression returns in full force as soon as the patient sleeps for even a few minutes.
- 71. In many corporations, employees are being replaced by automated equipment in order to save money. However, many workers who lose their jobs to automation will need government assistance to survive, and the same corporations that are laying people off will eventually pay for that assistance through increased taxes and unemployment insurance payments. Which of the following, if true, most strengthens the author's argument?
- A. Many workers who have already lost their jobs to automation have been unable to find new jobs.
- B. Many corporations that have failed to automate have seen their profits decline.
- C. Taxes and unemployment insurance are paid also by corporations that are not automating.
- D. Most of the new jobs created by automation pay less than the jobs eliminated by automation did.
- E. The initial investment in machinery for automation is often greater than the short-term savings in labor costs.
- 72. United States hospitals have traditionally relied primarily on revenues from paying patients to offset losses from unreimbursed care. Almost all paying patients now rely on governmental or private health insurance to pay hospital bills. Recently, insurers have been strictly limiting what they pay hospitals for the care of insured patients to amounts at or below actual costs. Which of the following conclusions is best supported by the information above?
- A. Although the advance of technology has made expensive medical procedures available to the wealthy, such procedures are out of the reach of low-income patients.
- B. If hospitals do not find ways of raising additional income for unreimbursed care, they must either deny some of that care or suffer losses if they give it.
- C. Some patients have incomes too high for eligibility for governmental health insurance but are unable to afford private insurance for hospital care.
- D. If the hospitals reduce their costs in providing care, insurance companies will maintain the current level of reimbursement, thereby providing more funds for unreimbursed care.
- E. Even though philanthropic donations have traditionally provided some support for the hospitals, such donations are at present declining.

CR Mixed-bag April Part 2

- 1. On Pacific islands, a newly arrived gecko species, the house gecko, is displacing the previously established mourning gecko in urban areas, but populations of the two species are more stable in rural areas far from human settlement. The house gecko does not attack the mourning gecko, but in areas where insects congregate it prevents the mourning gecko from feeding on them. Which of the following contributes most to an explanation of the difference between gecko populations in urban and rural areas?
- A. In urban areas, geckos are valued because they eat so many insects.
- B. Geckos defend territories against other members of the same species.
- C. House geckos that arrive on islands are carried there in boats and planes.
- D. In places where there are lighted buildings, insects tend to gather around the light.
- E. Mourning geckos are all females and reproduce asexually, but house geckos reproduce sexually.
- 2. Downtown Villieu was once a flourishing business district, but most Villieu-area businesses are now located only in the suburbs. The office buildings downtown lack the modern amenities most business operators demand today. To lure more businesses downtown, Villieu officials plan to have several modern office buildings constructed and to offer reduced local tax rates to any business that leases space in a new downtown building. Which of the following, if true, most threatens the plan's likelihood of success?
- A. Most of the businesses currently located in downtown Villieu have long-term leases on the space they occupy there.
- B. The existing office buildings in downtown Villieu have, on average, a much higher vacancy rate than do office buildings in Villieu's suburbs.
- C. The local tax rates in Villieu's suburbs are significantly lower than downtown Villieu's proposed rate for businesses that lease space in the new office buildings.
- D. Most of the businesses that currently lease office space in downtown Villieu also lease office space in Villieu's suburbs.
- E. With the new office buildings, downtown Villieu would have a greater amount of modern office space than any other downtown business district in the region.
- 3. Northern Air has dozens of flights daily into and out of Belleville Airport, which is highly congested. Northern Air depends for its success on economy and quick turnaround and consequently is planning to replace its large planes with Skybuses, whose novel aerodynamic design is extremely fuel efficient. The Skybus' fuel efficiency results in both lower fuel costs and reduced time spent refueling. Which of the following, if true, could present the most serious disadvantage for Northern Air in replacing their large planes with Skybuses?
- A. The Skybus would enable Northern Air to schedule direct flights to destinations that currently require stops for refueling.
- B. Aviation fuel is projected to decline in price over the next several years.
- C. The fuel efficiency of the Skybus would enable Northern Air to eliminate refueling at some of its destinations, but several mechanics would lose their jobs.
- D. None of Northern Air's competitors that use Belleville Airport are considering buying Skybuses.
- E. The aerodynamic design of the Skybus causes turbulence behind it when taking off that forces other planes on the runway to delay their takeoffs.

4. Which of the following most logically completes the argument?

A new machine for harvesting corn will allow rows to be planted only fifteen inches apart, instead of the usual thirty inches. Corn planted this closely will produce lower yields per plant. Nevertheless, the new machine will allow corn growers to double their profits per acre because ______.

- A. with the closer spacing of the rows, the growing corn plants will quickly form a dense canopy of leaves, which will, by shading the ground, minimize the need for costly weed control and irrigation
- B. with the closer spacing of the rows, corn plants will be forced to grow taller because of increased competition for sunlight from neighboring corn plants
- C. with the larger number of plants growing per acre, more fertilizer will be required
- D. with the spacing between rows cut by half, the number of plants grown per acre will almost double
- E. with the closer spacing of the rows, the acreage on which corn is planted will be utilized much more intensively than it was before, requiring more frequent fallow years in which corn fields are left unplanted

- 5. Microscopic plants called algae grow inside the top layer of sea ice in the Antarctic if enough sunlight reaches that layer of ice and enough seawater, which contains nutrients, reaches that layer after splashing onto the surface. Even though moderate snow cover reduces the sunlight that filters into the top layer, sea ice with moderate snow cover typically contains even more algae in the top layer than does sea ice with less snow cover. Which of the following, if true, most helps to explain the apparent discrepancy?
- A. As the weight of accumulated snow forces ice lower in the water, more seawater splashes onto the surface and seeps through the snow.
- B. Seawater in the Antarctic often contains higher concentrations of nutrients than does seawater in more temperate regions.
- C. As the air temperature around sea ice decreases during the winter, the likelihood decreases that snow will fall and thus add to any existing snow cover.
- D. The nutrients on which algae rely are common in seawater throughout the Antarctic.
- E. More sunlight filters through a layer of ice than through an equally thick layer of snow.

6. Which of the following most logically completes the passage?

Garnet and RenCo each provide health care for their employees. Garnet pays for both testing of its employees' cholesterol levels and treatment of high cholesterol. This policy saves Garnet money, since high cholesterol left untreated for many years leads to conditions that require very expensive treatment. However, RenCo does not have the same financial incentive to adopt such a policy, because ______.

- A. early treatment of high cholesterol does not entirely eliminate the possibility of a stroke later in life
- B. the mass media regularly feature stories encouraging people to maintain diets that are low in cholesterol
- C. RenCo has significantly more employees than Garnet has
- D. RenCo's employees are unlikely to have higher cholesterol levels than Garnet's employees
- E. the average length of time an employee stays with RenCo is less than it is with Garnet
- 7. United Lumber will use trees from its forests for two products. The tree trunks will be used for lumber and the branches converted into wood chips to make fiberboard. The cost of this conversion would be the same whether done at the logging site, where the trees are debranched, or at United's factory. However, wood chips occupy less than half the volume of the branches from which they are made. **The information given, if accurate, most strongly supports which of the following?**
- A. Converting the branches into wood chips at the logging site would require transporting a fully assembled wood-chipping machine to and from the site.
- B. It would be more economical to debranch the trees at the factory where the fiberboard is manufactured.
- C. The debranching of trees and the conversion of the branches into chips are the only stages in the processing of branches that it would be in United's economic advantage to perform at the logging site.
- D. Transportation costs from the logging site to the factory that are determined by volume of cargo would be lower if the conversion into chips is done at the logging site rather than at the factory.
- E. In the wood-processing industry, branches are used only for the production of wood chips for fiberboard.

8. Which of the following most logically completes the argument?

Utrania was formerly a major petroleum exporter, but in recent decades economic stagnation and restrictive regulations inhibited investment in new oil fields. In consequence, Utranian oil exports dropped steadily as old fields became depleted. Utrania's currently improving economic situation, together with less-restrictive regulations, will undoubtedly result in the rapid development of new fields. However, it would be premature to conclude that the rapid development of new fields will result in higher oil exports, because ______.

- A. the price of oil is expected to remain relatively stable over the next several years
- B. the improvement in the economic situation in Utrania is expected to result in a dramatic increase in the proportion of Utranians who own automobiles
- C. most of the investment in new oil fields in Utrania is expected to come from foreign sources
- D. new technology is available to recover oil from old oil fields formerly regarded as depleted
- E. many of the new oil fields in Utrania are likely to be as productive as those that were developed during the period when Utrania was a major oil exporter

- 9. Beta Corporation claims that it no longer has enough work for the 60 computer data-entry workers that it is laying off. These workers have heard, however, that the company is buying 100 new computers. So the workers concluded that the company's real reason for laying them off is to fill their jobs with lower-paid workers. Which of the following, if true, would most undermine the workers' conclusion?
- A. Most of the workers being laid off know how to enter data on a number of different computer systems.
- B. Orders for almost all of Beta Corporation products have increased over the past year.
- C. A recent memorandum from the president of Beta Corporation requested that all data generated by the company be stored in computerized form.
- D. Beta Corporation's computer data-entry workers are more experienced and hence more highly paid than people doing comparable work in other companies.
- E. Beta Corporation's new computers will allow its current management and sales staff to perform many of the tasks that the data-entry workers were previously doing.

10. Which of the following most logically completes the passage?

For the past several years, a certain technology has been widely used to transmit data among networked computers. Recently two data transmission companies, Aptron and Gammatech, have each developed separate systems that allow network data transmission at rates ten times faster than the current technology allows. Although the systems are similarly priced and are equally easy to use, Aptron's product is likely to dominate the market, because ______.

- A. Gammatech has been in the business of designing data transmission systems for several years more than Aptron has
- B. the number of small businesses that need computer networking systems is likely to double over the next few years
- C. it is much more likely that Gammatech's system will be expandable to meet future needs
- D. unlike many data transmission companies, Aptron and Gammatech develop computers in addition to data transmission systems
- E. it is easier for users of the current data transmission technology to switch to Aptron's product than to Gammatech's
- 11. Radio stations with radio data system (RDS) technology broadcast special program information that only radios with an RDS feature can receive. Between 1994 and 1996, the number of RDS radio stations in Verdland increased from 250 to 600. However, since the number of RDS-equipped radios in Verdland was about the same in 1996 as in 1994, the number of Verdlanders receiving the special program information probably did not increase significantly. Which of the following is an assumption on which the argument depends?
- A. Few if any of the RDS radio stations that began broadcasting in Verdland after 1994 broadcast to people with RDS-equipped radios living in areas not previously reached by RDS stations.
- B. In 1996 most Verdlanders who lived within the listening area of an RDS station already had a radio equipped to receive RDS
- C. Equipping a radio station with RDS technology does not decrease the station's listening area.
- D. In 1996 Verdlanders who did not own radios equipped to receive RDS could not receive any programming from the RDS radio stations that began broadcasting in Verdland after 1994.
- E. The RDS radio stations in Verdland in 1996 did not all offer the same type of programming.
- 12. **Situation**: For five years the Souper restaurant chain has maintained rapid sales growth in Danport, primarily by opening new restaurants that draw patrons away from other restaurants in their vicinity.

Goal: Souper wishes to achieve continued rapid sales growth in Danport over the next two years.

Proposal for consideration: Continue to open new restaurants in Danport during the next two years at the same rate as in the last two years.

In light of the situation, which of the following, if true, most strongly argues that adopting the proposal would be an ineffective way of achieving the goal?

- A. At times at which customers find Souper restaurants too crowded, they often go to other restaurants nearby.
- B. The Souper chain has generally opened new restaurants in locations that are in the vicinity of a large number of other restaurants.
- C. Souper restaurants generally offer a much smaller variety of foods than many of the other restaurants in their vicinity.
- D. Virtually all potential sites for new Souper restaurants in Danport are located in the vicinity of existing Souper restaurants.
- E. Souper restaurants have always offered meals that are somewhat less expensive than meals at restaurants that compete with Souper for patrons.

- 13. An unusually severe winter occurred in Europe after the continent was blanketed by a blue haze resulting from the eruption of the Laki Volcano in the European republic of Iceland in the summer of 1984. Thus, it is evident that major eruptions cause the atmosphere to become cooler than it would be otherwise. **Which of the following statements, if true, most seriously weakens the argument above?**
- A. The cooling effect triggered by volcanic eruptions in 1985 was counteracted by an unusual warming of Pacific waters.
- B. There is a strong statistical link between volcanic eruptions and the severity of the rainy season in India.
- C. A few months after El Chichn's large eruption in April 1982, air temperatures throughout the region remained higher than expected, given the long-term weather trends.
- D. The climatic effects of major volcanic eruptions can temporarily mask the general warming trend resulting from an excess of carbon dioxide in the atmosphere.
- E. Three months after an early springtime eruption in South America during the late 19th century, sea surface temperatures near the coast began to fall.
- 14. Most household appliances use electricity only when in use. Many microwave ovens, however, have built-in clocks and so use some electricity even when they are not in use. The clocks each consume about 45 kilowatt-hours per year. Therefore, households whose microwave oven has no built-in clock use 45 kilowatt-hours per year less, on average, than do comparable households whose microwave oven is otherwise similar but has a built-in clock. Which of the following is an assumption on which the argument depends?
- A. Households that do not have a microwave oven use less energy per year, on average, than do households that have a microwave oven.
- B. Microwave ovens with a built-in clock do not generally cost more to buy than microwave ovens without a built-in clock.
- C. All households that have a microwave oven also have either a gas oven or a conventional electric oven.
- D. Households whose microwave oven does not have a built-in clock are no more likely to have a separate electric clock plugged in than households whose microwave oven has one.
- E. There are more households that have a microwave oven with a built-in clock than there are households that have a microwave oven without a built-in clock.
- 15. Some airlines allegedly reduce fares on certain routes to a level at which they lose money, in order to drive competitors off those routes. However, this method of eliminating competition cannot be profitable in the long run. Once an airline successfully implements this method, any attempt to recoup the earlier losses by charging high fares on that route for an extended period would only provide competitors with a better opportunity to undercut the airline's fares. Which of the following, if true, most seriously weakens the argument?
- A. In some countries it is not illegal for a company to drive away competitors by selling a product below cost.
- B. Airline executives generally believe that a company that once underpriced its fares to drive away competitors is very likely to do so again if new competitors emerge.
- C. As part of promotions designed to attract new customers, airlines sometimes reduce their ticket prices to below an economically sustainable level.
- D. On deciding to stop serving particular routes, most airlines shift resources to other routes rather than reduce the size of their operations.
- E. When airlines dramatically reduce their fares on a particular route, the total number of air passengers on that route increases greatly.
- 16. When an airplane is taken out of service for maintenance, it is often repainted as well, and during the repainting no other maintenance work can be done on the plane. In order to reduce maintenance time, airline officials are considering using a new nontoxic plastic film instead of paint. The film takes just as long to apply as paint does, but many other maintenance tasks can be carried out at the same time. Which of the following, if true, is further evidence that using the film will help the airline officials achieve their goal?
- A. Unlike paint, the film gives a milky tone to certain colors.
- B. At the end of its useful life, the film can be removed much more quickly than paint can.
- C. The film can be applied only by technicians who have received special training.
- D. The metal exteriors of airplanes have to be protected from high temperatures and caustic chemicals such as exhaust gases.
- E. Even at speeds considerably higher than the normal speed of a passenger jet, the film remains securely attached.

- 17. At present the Hollywood Restaurant has only standard-height tables. However, many customers come to watch the celebrities who frequent the Hollywood, and they would prefer tall tables with stools because such seating would afford a better view of the celebrities. Moreover, diners seated on stools typically do not stay as long as diners seated at standard-height tables. Therefore, if the Hollywood replaced some of its seating with high tables and stools, its profits would increase. The argument is vulnerable to criticism on the grounds that it gives reason to believe that it is likely that
- A. some celebrities come to the Hollywood to be seen, and so might choose to sit at the tall tables if they were available
- B. the price of meals ordered by celebrities dining at the Hollywood compensates for the longer time, if any, they spend lingering over their meals
- C. a customer of the Hollywood who would choose to sit at a tall table would be an exception to the generalization about lingering
- D. a restaurant's customers who spend less time at their meals typically order less expensive meals than those who remain at their meals longer
- E. with enough tall tables to accommodate all the Hollywood's customers interested in such seating, there would be no view except of other tall tables
- 18. The Calex Telecommunications Company is planning to introduce cellular telephone service into isolated coastal areas of Caladia, a move which will require considerable investment. However, the only significant economic activity in these areas is small-scale coffee farming, and none of the coffee farmers make enough money to afford the monthly service fees that Calex would have to charge to make a profit. Nevertheless, Calex contends that making the service available to these farmers will be profitable. Which of the following, if true, provides the strongest support for Calex's contention?
- A. Currently, Caladian coffee farmers are forced to sell their coffee to local buyers at whatever price those buyers choose to pay because the farmers are unable to remain in contact with outside buyers who generally offer higher prices.
- B. In the coastal areas of Caladia where Calex proposes to introduce cellular telephone service, there is currently no fixed-line telephone service because fixed-line companies do not believe that they could recoup their investment.
- C. A cellular telephone company can break even with a considerably smaller number of subscribers than a fixedline company can, even in areas such as the Caladian coast, where there is no difficult terrain to drive up the costs of installing fixed lines.
- D. Calex bases its monthly fees for cellular telephone service in a given region partly on the cost of installing the necessary equipment to provide the service there.
- E. Calex has for years made a profit on cellular telephone service in Caladia's capital city, which is not far from the coastal region.
- 19. With a record number of new companies starting up in Derderia and with previously established companies adding many jobs, a record number of new jobs were created last year in the Derderian economy. This year, previously established companies will not be adding as many new jobs overall as such companies added last year. Therefore, unless a record number of companies start up this year, Derderia will not break its record for new jobs created. Which of the following is an assumption on which the argument relies?
- A. Each year, new companies starting up create more new jobs overall than do previously established companies.
- B. Companies established last year will not add a greater number of jobs overall this year than they did last year.
- C. This year, the new companies starting up will not provide substantially more jobs per company than did new companies last year.
- D. This year, the overall number of jobs created by previously established companies will be less than the overall number of jobs lost at those companies.
- E. The number of jobs created in the Derderian economy last year was substantially larger than the number of jobs lost last year.

- 20. During the past year, Pro-Tect Insurance Company's total payout on car-theft claims has been larger than the company can afford to sustain. Pro-Tect cannot reduce the number of car-theft policies it carries, so it cannot protect itself against continued large payouts that way. Therefore, Pro-Tect has decided to offer a discount to holders of car-theft policies whose cars have antitheft devices. Many policyholders will respond to the discount by installing such devices, since the amount of the discount will within two years typically more than cover the cost of installation. Thus, because cars with antitheft devices are rarely stolen, Pro-Tect's plan is likely to reduce its annual payouts.
 - In the argument above, the two portions in **boldface** play which of the following roles?

 The first and the second are both evidence offered by the argument as support for its main conclusion.
- B. The first presents a problem a response to which the argument assesses; the second is the judgment reached by that assessment.
- C. The first is the position the argument seeks to establish; the second is a judgment the argument uses to support that position.
- D. The first is a development that the argument seeks to explain; the second is a prediction the argument makes in support of the explanation it offers.
- E. The first presents a development whose likely outcome is at issue in the argument; the second is a judgment the argument uses in support of its conclusion about that outcome.
- 21. **Film Director**: It is true that certain characters and plot twists in my newly released film The Big Heist are strikingly similar to characters and plot twists in Thieves, a movie that came out last year. Based on these similarities, the film studio that produced Thieves is now accusing me of taking ideas from that film. The accusation is clearly without merit. All production work on The Big Heist was actually completed months before Thieves was released. **Which of the following, if true, provides the strongest support for the director's rejection of the accusation?**
- A. Before Thieves began production, its script had been circulating for several years among various film studios, including the studio that produced The Big Heist.
- B. The characters and plot twists that are most similar in the two films have close parallels in many earlier films of the same genre.
- C. The film studio that produced Thieves seldom produces films in this genre.

Α.

- D. The director of Thieves worked with the director of The Big Heist on several earlier projects.
- E. The time it took to produce The Big Heist was considerably shorter than the time it took to produce Thieves.
- 22. Herbicides allow cereal crops to be grown very efficiently, with virtually no competition from weeds. In Britain, partridge populations have been steadily decreasing since herbicide use became widespread. Some environmentalists claim that these birds, which live in and around cereal crop fields, are being poisoned by the herbicides. However, tests show no more than trace quantities of herbicides in partridges on herbicide-treated land. Therefore, something other than herbicide use must be responsible for the population decrease. Which of the following, if true about Britain, most seriously weakens the argument?
- A. The elimination of certain weeds from cereal crop fields has reduced the population of the small insects that live on those weeds and that form a major part of partridge chicks' diet.
- B. Since partridges are valued as game birds, records of their population are more carefully kept than those for many other birds.
- C. Some of the weeds that are eliminated from cereal crop fields by herbicides are much smaller than the crop plants themselves and would have no negative effect on crop yield if they were allowed to grow.
- D. Birds other than partridges that live in or around cereal crop fields have also been suffering population declines.
- E. The toxins contained in herbicides typically used on cereal crops can be readily identified in the tissues of animals that have ingested them.

- 23. A product that represents a clear technological advance over competing products can generally command a high price. Because technological advances tend to be quickly surpassed and companies want to make large profits while they still can, many companies charge the maximum possible price for such a product. But large profits on the new product will give competitors a strong incentive to quickly match the new product's capabilities. Consequently, the strategy to maximize overall profit from a new product is to charge less than the greatest possible price.
 - In the argument above, the two portions in **boldface** play which of the following roles?
- A. The first is a consideration that has been raised to argue that a certain strategy is counterproductive; the second presents that strategy.
- B. The first is a consideration raised to support the strategy that the argument recommends; the second presents that strategy.
- C. The first is a consideration raised to explain the appeal of a certain strategy; the second presents that strategy.
- D. The first is an assumption, rejected by the argument, that has been used to justify a course of action; the second presents that course of action.
- E. The first is a consideration that has been used to justify pursuing a goal that the argument rejects; the second presents a course of action that has been adopted in pursuit of that goal.
- 24. Although exposure to asbestos is the primary cause of mesothelioma, a slow-developing cancer, researchers believe that infection by the SV40 virus is a contributing cause, since in the United States 60 percent of tissue samples from mesotheliomas, but none from healthy tissue, contain SV40. SV40 is a monkey virus; however, in 1960 some polio vaccine was contaminated with the virus. Researchers hypothesize that this vaccine was the source of the virus found in mesotheliomas decades later. Which of the following, if true, most strongly supports the researchers' hypothesis?
- A. SV40 is widely used as a research tool in cancer laboratories.
- B. Changes in the technique of manufacturing the vaccine now prevent contamination with SV40.
- C. Recently discovered samples of the vaccine dating from 1960 still show traces of the virus.
- D. In a small percentage of cases of mesothelioma, there is no history of exposure to asbestos.
- E. In Finland, where the polio vaccine was never contaminated, samples from mesotheliomas do not contain SV40.
- 25. In the past year Harborville has had an unusually high rate of new cases of a certain disease. An investigation revealed that over the past five years Harborville's public water supply has had a high level of pollutants. Medical researchers have hypothesized that Harborville's water is responsible for the high rate of new cases of the disease. Each of the following, if true, provides additional support for the researchers' hypothesis EXCEPT:
- A. Most of the people afflicted with new cases of the disease had regularly drunk larger quantities of Harborville's water than had other Harborville residents.
- B. The same type of pollutants that were found in Harborville's water have independently been linked to occurrences in other towns of high rates of the disease.
- C. Some of the people with newly diagnosed cases of the disease began to develop the disease before Harborville's water became polluted.
- D. The rate of new cases of the disease among residents of Harborville who get their water from private sources is not unusually high.
- E. Towns with geographic and demographic characteristics similar to those of Harborville but without polluted water do not have as high a rate of the disease as does Harborville.
- 26. A new commercial radio station in Greenfield plans to play songs that were popular hits fifteen to twenty-five years ago. It hopes in this way to attract an audience made up mainly of people between thirty-five and forty-five years old and thereby to have a strong market appeal to advertisers. Each of the following, if true, strengthens the prospects that the radio station's plan will succeed EXCEPT:
- A. People tend to remain very fond of the music that they heard when they were in their teens and early twenties.
- B. In a number of cities demographically similar to Greenfield, radio stations that play recordings of popular music from fifteen to twenty-five years ago have succeeded commercially.
- C. People in the thirty-five- to forty-five-year-old age group are more likely to listen to the radio for news than for music.
- D. The thirty-five- to forty-five-year-old age group is one in which people tend to have comparatively high levels of income and are involved in making household purchases.
- E. Among the few radio stations in the Greenfield area, there is none that plays music from this particular period for more than a few hours per week.

- 27. Among people who experience migraine headaches, some experience what doctors call "common" migraines, whereas others experience "classical" migraines. Siblings and spouses of common migraine sufferers are themselves twice as likely as the general population to experience common migraines. Siblings of classical migraine sufferers are four times more likely than the general population to experience classical migraines, whereas spouses of classical migraine sufferers are no more likely than the general population to experience such headaches. The information above provides the most support for which of the following hypotheses?
- A. Susceptibility to classical migraines is more dependent on hereditary factors than is susceptibility to common migraines.
- B. Unmarried adults are more likely to suffer from classical migraines than they are to suffer from common migraines.
- C. People who do not experience migraine headaches are unlikely to have spouses who are migraine headache sufferers.
- D. Children of people who suffer from common migraines are not more likely than the general population to experience a common migraine.
- E. Between one-quarter and one-half of the general population suffer from either common or classical migraine headaches.
- 28. **Hutonian Government Official**: Federal law requires truck drivers to take a long break after driving for ten hours, but truck drivers frequently do not comply. Since the public rest areas along our highways cannot accommodate all the drivers needing a break, we plan to build more rest areas to increase the rate of compliance.

Hutonian Business Representative: But if the parking lots around our businesses are considered, there are more than enough parking places.

Which of the following, if true about Hutonia, would provide a reason for persisting with the government official's plan despite the objection?

- A. Public parking areas are evenly distributed along the highways.
- B. Truck drivers are most likely not to comply with the federal law if the total time required for a trip exceeds ten hours by less than an hour.
- C. In comparison to public rest areas, private parking lots near highways tend to be time-consuming for drivers to reach.
- D. Even when rest areas are available, some truck drivers park in places, such as highway access ramps, where their trucks are likely to cause accidents.
- E. Some public parking areas, particularly those on heavily traveled roads, are substantially larger than others.
- 29. To prevent harbor porpoises from getting tangled in its nets and suffocating, a fishing company installed acoustic alarms on all its boats that fish in waters off Massachusetts. The sound emitted temporarily disorients the porpoises and frightens them away. Since the installation of the alarms, the average number of porpoises caught in the company's nets has dropped from eight to one per month. The alarms, therefore, are saving the lives of harbor porpoises in those waters. Which of the following is an assumption on which the argument depends?
- A. The use of acoustic alarms increases the number of commercial fish caught by the fishing company's boats.
- B. When disoriented, harbor porpoises are not significantly more likely to be killed by other boats.
- C. Environmentalists advocate the use of acoustic alarms as a means of protecting the harbor porpoise population.
- D. The alarms were installed at the time of year when harbor porpoises are most plentiful in the Massachusetts waters.
- E. The cost of installing acoustic alarms on fishing boats is less than the cost of repairing nets damaged by harbor porpoises.

- 30. An advertising agency must leave its office building. To save overhead costs, it is considering setting up a "virtual office" instead of moving to an adjacent office building. Employees will do their work on computers, as they do now, but will do so at home, sharing their work with colleagues by communicating text and designs to colleagues' computers through telephone lines, receiving typed comments, and then revising the work until it is satisfactory. Which of the following, if true, indicates a disadvantage of the virtual office plan?
- A. The agency can move its computers and associated equipment into employees' homes without purchasing any new equipment or requiring employees to purchase such equipment.
- B. To reach the current office building and return home, employees spend an average of one and a half hours per day commuting, usually in heavy traffic.
- C. The employees of the advertising agency are accustomed to autonomy in monitoring their own progress and productivity.
- D. Employees would be able to adapt quickly to using computers in a virtual office setting, since employees' current use of computers to produce designs requires a high level of skill.
- E. Expressions and gestures in face-to-face exchanges are an important aid to employees in gauging the viability of new ideas they have proposed.
- 31. The symptoms that United States President Zachary Taylor began showing five days before his death are consistent with arsenic poisoning. Recent examination of Taylor's bones, however, revealed levels of arsenic comparable to those found in the bones of Taylor's contemporaries. These levels are much lower than the levels of arsenic that remain in the bones of arsenic poisoning victims who live for more than a day after ingesting a lethal dose of the poison. Which of the following is most strongly supported by the statements given?
- A. The symptoms that Taylor began showing five days before his death are consistent with poisoning other than arsenic poisoning.
- B. Taylor's death was not the result of any kind of poisoning.
- C. The symptoms that Taylor began showing five days before his death were not caused by a lethal dose of arsenic.
- D. The symptoms that Taylor began showing five days before his death grew more severe each day.
- E. It is unusual for a person who has ingested a lethal dose of arsenic to survive for more than a day.
- 32. **Paleontologist**: About 2.8 million years ago, many species that lived near the ocean floor suffered substantial population declines. These declines coincided with the onset of an ice age. The notion that cold killed those bottom-dwelling creatures outright is misguided, however; temperatures near the ocean floor would have changed very little. **Nevertheless, the cold probably did cause the population declines, though indirectly.** Many bottom-dwellers depended for food on plankton, small organisms that lived close to the surface and sank to the bottom when they died. **Most probably, the plankton suffered a severe population decline as a result of sharply lower temperatures at the surface, depriving many bottom-dwellers of food.**
 - In the paleontologist's reasoning, the two portions in **boldface** play which of the following roles?
- A. The first introduces the hypothesis proposed by the paleontologist; the second is a judgment offered in spelling out that hypothesis.
- B. The first introduces the hypothesis proposed by the paleontologist; the second is a position that the paleontologist opposes.
- C. The first is an explanation challenged by the paleontologist; the second is an explanation proposed by the paleontologist.
- D. The first is a judgment advanced in support of a conclusion reached by the paleontologist; the second is that conclusion.
- E. The first is a generalization put forward by the paleontologist; the second presents certain exceptional cases in which that generalization does not hold.
- 33. Over the last five years, demand for hotel rooms in Cenopolis has increased significantly, as has the average price Cenopolis hotels charge for rooms. These trends are projected to continue for the next several years. In response to this economic forecast, Centennial Commercial, a real estate developer, is considering a plan to convert several unoccupied office buildings it owns in Cenopolis into hotels in order to maximize its revenues from these properties. Which of the following would it be most useful for Centennial Commercial to know in evaluating the plan it is considering?
- A. Whether the population of Cenopolis is expected to grow in the next several years
- B. Whether demand for office space in Cenopolis is projected to increase in the near future
- C. Whether the increased demand for hotel rooms, if met, is likely to lead to an increase in the demand for other travel-related services
- D. Whether demand for hotel rooms has also increased in other cities where Centennial owns office buildings
- E. Whether, on average, hotels that have been created by converting office buildings have fewer guest rooms than do hotels that were built as hotels

- 34. When demand for a factory's products is high, more money is spent at the factory for safety precautions and machinery maintenance than when demand is low. Thus the average number of on-the-job accidents per employee each month should be lower during periods when demand is high than when demand is low and less money is available for safety precautions and machinery maintenance. Which of the following, if true about a factory when demand for its products is high, casts the most serious doubt on the conclusion drawn above?
- A. Its employees ask for higher wages than they do at other times.
- B. Its management hires new workers but lacks the time to train them properly.
- C. Its employees are less likely to lose their jobs than they are at other times.
- D. Its management sponsors a monthly safety award for each division in the factory.
- E. Its old machinery is replaced with modern, automated models.
- 35. It is illegal to advertise prescription medications in Hedland except directly to physicians, either by mail or in medical journals. A proposed law would allow general advertising of prescription medications. Opponents object that the general population lacks the specialized knowledge to evaluate such advertisements and might ask their physicians for inappropriate medications. But since physicians have the final say as to whether to prescribe a medication for a patient, inappropriate prescriptions would not become more common. Which of the following would it be most useful to establish in order to evaluate the argument?
- A. Whether advertising for prescription medications might alert patients to the existence of effective treatments for minor ailments that they had previously thought to be untreatable
- B. Whether some people might go to a physician for no reason other than to ask for a particular medication they have seen advertised
- C. Whether the proposed law requires prescription-medication advertisements directed to the general public to provide the same information as do advertisements directed to physicians
- D. Whether advertisements for prescription medications are currently an important source of information about newly available medications for physicians
- E. Whether physicians would give in to a patient's demand for a prescription medication chosen by the patient when the one originally prescribed by the physician fails to perform as desired
- 36. **Traveler**: Southern Airways has a far worse safety record than Air Dacentaria over the past few years, in terms of both the frequency of accidents and the severity of accidents. Therefore, although Air Dacentaria is slightly more expensive, I will choose it over Southern Airways for my flight from Pederton to Dacenta, since it is worth paying extra to have a safer flight. **Which of the following, if true, casts the most serious doubt on the traveler's argument?**
- A. Air Dacentaria's flight from Pederton to Dacenta is nonstop, whereas Southern Airways' flight touches down in Gorinda on the way.
- B. Most Southern Airways flights, but not its flight from Pederton to Dacenta, use Sarmouth airport, which because of its mountainous location is one of the world's most dangerous.
- C. For its flights from Pederton to Dacenta, Southern Airways uses a different model of airplane, with a smaller capacity, than the model Air Dacentaria uses for its flights on the same route.
- D. Only in the last few years has the cost of flying from Pederton to Dacenta been more expensive on Air Dacentaria than on Southern Airways.
- E. Although the frequency of accidents is greater on Southern Airways, on both airlines the proportion of flights that have accidents is very small.
- 37. The use of radar detectors in commercial vehicles was banned because commercial truck and bus drivers were using these devices to drive faster than the posted speed limit without fear of arrest. Since drivers of noncommercial vehicles also use radar detectors and since speeding decreases safety for any vehicle, use of radar detectors should also be banned in noncommercial vehicles to increase safety. Which of the following, if true, most strongly supports the argument above?
- A. The average noncommercial-vehicle driver is involved in less long-distance driving than is the average commercial-vehicle driver.
- B. In many places airplanes or helicopters are used rather than radar to locate vehicles traveling faster than the posted speed limit.
- C. The ban on radar detectors in commercial vehicles has been effective in deterring them from speeding.
- D. Traffic accidents involving a truck or bus generally pose a greater threat of injury or death than do other accidents.
- E. Radar detectors are sometimes set off by devices other than the law enforcement devices that the radar detectors were built to detect.

- 38. Offshore oil-drilling operations entail an unavoidable risk of an oil spill, but importing oil on tankers presently entails an even greater such risk per barrel of oil. Therefore, if we are to reduce the risk of an oil spill without curtailing our use of oil, we must invest more in offshore operations and import less oil on tankers. **Which of the following, if true, most seriously weakens the argument above?**
- A. Tankers can easily be redesigned so that their use entails less risk of an oil spill.
- B. Oil spills caused by tankers have generally been more serious than those caused by offshore operations.
- C. The impact of offshore operations on the environment can be controlled by careful management.
- D. Offshore operations usually damage the ocean floor, but tankers rarely cause such damage.
- E. Importing oil on tankers is currently less expensive than drilling for it offshore.
- 39. The imposition of quotas limiting imported steel will not help the big American steel mills. In fact, the quotas will help "mini-mills" flourish in the United States. Those small domestic mills will take more business from the big American steel mills than would have been taken by the foreign steel mills in the absence of quotas. Which of the following, if true, would cast the most serious doubt on the claim made in the last sentence above?
- A. Quality rather than price is a major factor in determining the type of steel to be used for a particular application.
- B. Foreign steel mills have long produced grades of steel comparable in quality to the steel produced by the big American mills.
- C. American quotas on imported goods have often induced other countries to impose similar quotas on American goods.
- D. Domestic "mini-mills" consistently produce better grades of steel than do the big American mills.
- E. Domestic "mini-mills" produce low-volume, specialized types of steel that are not produced by the big American steel mills.
- 40. A recent report determined that although only three percent of drivers on Maryland highways equipped their vehicles with radar detectors, thirty-three percent of all vehicles ticketed for exceeding the speed limit were equipped with them. Clearly, drivers who equip their vehicles with radar detectors are more likely to exceed the speed limit regularly than are drivers who do not. **The conclusion drawn above depends on which of the following assumptions?**
- A. Drivers who equip their vehicles with radar detectors are less likely to be ticketed for exceeding the speed limit than are drivers who do not.
- B. Drivers who are ticketed for exceeding the speed limit are more likely to exceed the speed limit regularly than are drivers who are not ticketed.
- C. The number of vehicles that were ticketed for exceeding the speed limit was greater than the number of vehicles that were equipped with radar detectors.
- D. Many of the vehicles that were ticketed for exceeding the speed limit were ticketed more than once in the time period covered by the report.
- E. Drivers on Maryland highways exceeded the speed limit more often than did drivers on other state highways not covered in the report.
- 41. In comparison to the standard typewriter keyboard, the EFCO keyboard, which places the most-used keys nearest the typist's strongest fingers, allows faster typing and results in less fatigue. Therefore, replacement of standard keyboards with the EFCO keyboard will result in an immediate reduction of typing costs. Which of the following, if true, would most weaken the conclusion drawn above?
- A. People who use both standard and EFCO keyboards report greater difficulty in the transition from the EFCO keyboard to the standard keyboard than in the transition from the standard keyboard to the EFCO keyboard.
- B. EFCO keyboards are no more expensive to manufacture than are standard keyboards and require less frequent repair than do standard keyboards.
- C. The number of businesses and government agencies that use EFCO keyboards is increasing each year.
- D. The more training and experience an employee has had with the standard keyboard, the more costly it is to train that employee to use the EFCO keyboard.
- E. Novice typists can learn to use the EFCO keyboard in about the same amount of time it takes them to learn to use the standard keyboard.

- 42. Researchers have found that when very overweight people, who tend to have relatively low metabolic rates, lose weight primarily through dieting, their metabolisms generally remain unchanged. They will thus burn significantly fewer calories at the new weight than do people whose weight is normally at that level. Such newly thin persons will, therefore, ultimately regain weight until their body size again matches their metabolic rate. The conclusion of the argument above depends on which of the following assumptions?
- A. Relatively few very overweight people who have dieted down to a new weight tend to continue to consume substantially fewer calories than do people whose normal weight is at that level.
- B. The metabolisms of people who are usually not overweight are much more able to vary than the metabolisms of people who have been very overweight.
- C. The amount of calories that a person usually burns in a day is determined more by the amount that is consumed that day than by the current weight of the individual.
- D. Researchers have not yet determined whether the metabolic rates of formerly very overweight individuals can be accelerated by means of chemical agents.
- E. Because of the constancy of their metabolic rates, people who are at their usual weight normally have as much difficulty gaining weight as they do losing it.
- 43. Half of the subjects in an experiment—the experimental group—consumed large quantities of a popular artificial sweetener. Afterward, this group showed lower cognitive abilities than did the other half of the subjects—the control group—who did not consume the sweetener. The detrimental effects were attributed to an amino acid that is one of the sweetener's principal constituents. Which of the following, if true, would best support the conclusion that some ingredient of the sweetener was responsible for the experimental results?
- A. Most consumers of the sweetener do not consume as much of it as the experimental group members did.
- B. The amino acid referred to in the conclusion is a component of all proteins, some of which must be consumed for adequate nutrition.
- C. The quantity of the sweetener consumed by individuals in the experimental group is considered safe by federal food regulators.
- D. The two groups of subjects were evenly matched with regard to cognitive abilities prior to the experiment.
- E. A second experiment in which subjects consumed large quantities of the sweetener lacked a control group of subjects who were not given the sweetener.
- 44. Half of the subjects in an experiment—the experimental group—consumed large quantities of a popular artificial sweetener. Afterward, this group showed lower cognitive abilities than did the other half of the subjects—the control group—who did not consume the sweetener. The detrimental effects were attributed to an amino acid that is one of the sweetener's principal constituents. Which of the following, if true, would best help explain how the sweetener might produce the observed effect?
- A. The government's analysis of the artificial sweetener determined that it was sold in relatively pure form.
- B. A high level of the amino acid in the blood inhibits the synthesis of a substance required for normal brain functioning.
- C. Because the sweetener is used primarily as a food additive, adverse reactions to it are rarely noticed by consumers.
- D. The amino acid that is a constituent of the sweetener is also sold separately as a dietary supplement.
- E. Subjects in the experiment did not know whether they were consuming the sweetener or a second, harmless substance.
- 45. The recent decline in the value of the dollar was triggered by a prediction of slower economic growth in the coming year. But that prediction would not have adversely affected the dollar had it not been for the government's huge budget deficit, which must therefore be decreased to prevent future currency declines.

 Which of the following, if true, would most seriously weaken the conclusion about how to prevent future currency declines?
- A. The government has made little attempt to reduce the budget deficit.
- B. The budget deficit has not caused a slowdown in economic growth.
- C. The value of the dollar declined several times in the year prior to the recent prediction of slower economic growth.
- D. Before there was a large budget deficit, predictions of slower economic growth frequently caused declines in the dollar's value.
- E. When there is a large budget deficit, other events in addition to predictions of slower economic growth sometimes trigger declines in currency value.

- 46. Neither a rising standard of living nor balanced trade, by itself, establishes a country's ability to compete in the international marketplace. Both are required simultaneously since standards of living can rise because of growing trade deficits and trade can be balanced by means of a decline in a country's standard of living. If the facts stated in the passage above are true, a proper test of a country's ability to be competitive is its ability to
- A. balance its trade while its standard of living rises
- B. balance its trade while its standard of living falls
- C. increase trade deficits while its standard of living rises
- D. decrease trade deficits while its standard of living falls
- E. keep its standard of living constant while trade deficits rise
- 47. Traditionally, decision-making by managers that is reasoned step-by-step has been considered preferable to intuitive decision-making. However, a recent study found that top managers used intuition significantly more than did most middle- or lower-level managers. This confirms the alternative view that intuition is actually more effective than careful, methodical reasoning. **The conclusion above is based on which of the following assumptions?**
- A. Methodical, step-by-step reasoning is inappropriate for making many real-life management decisions.
- B. Top managers have the ability to use either intuitive reasoning or methodical, step-by-step reasoning in making decisions.
- C. The decisions made by middle- and lower-level managers can be made as easily by using methodical reasoning as by using intuitive reasoning.
- D. Top managers use intuitive reasoning in making the majority of their decisions.
- E. Top managers are more effective at decision-making than middle- or lower-level managers.
- 48. Certain messenger molecules fight damage to the lungs from noxious air by telling the muscle cells encircling the lungs' airways to contract. This partially seals off the lungs. An asthma attack occurs when the messenger molecules are activated unnecessarily, in response to harmless things like pollen or household dust. Which of the following, if true, points to the most serious flaw of a plan to develop a medication that would prevent asthma attacks by blocking receipt of any messages sent by the messenger molecules referred to above?
- A. Researchers do not yet know how the body produces the messenger molecules that trigger asthma attacks.
- B. Researchers do not yet know what makes one person's messenger molecules more easily activated than another's.
- C. Such a medication would not become available for several years, because of long lead times in both development and manufacture.
- D. Such a medication would be unable to distinguish between messages triggered by pollen and household dust and messages triggered by noxious air.
- E. Such a medication would be a preventative only and would be unable to alleviate an asthma attack once it had started.
- 49. Start-up companies financed by venture capitalists have a much lower failure rate than companies financed by other means. Source of financing, therefore, must be a more important causative factor in the success of a start-up company than are such factors as the personal characteristics of the entrepreneur, the quality of strategic planning, or the management structure of the company. Which of the following, if true, most seriously weakens the argument above?
- A. Venture capitalists tend to be more responsive than other sources of financing to changes in a start-up company's financial needs.
- B. The strategic planning of a start-up company is a less important factor in the long-term success of the company than are the personal characteristics of the entrepreneur.
- C. More than half of all new companies fail within five years.
- D. The management structures of start-up companies are generally less formal than the management structures of ongoing businesses.
- E. Venture capitalists base their decisions to fund start-up companies on such factors as the characteristics of the entrepreneur and quality of strategic planning of the company.

- 50. When people evade income taxes by not declaring taxable income, a vicious cycle results. Tax evasion forces lawmakers to raise income tax rates, which causes the tax burden on nonevading taxpayers to become heavier. This, in turn, encourages even more taxpayers to evade income taxes by hiding taxable income. **The vicious cycle described above could not result unless which of the following were true?**
- A. An increase in tax rates tends to function as an incentive for taxpayers to try to increase their pretax incomes.
- B. Some methods for detecting tax evaders, and thus recovering some tax revenue lost through evasion, bring in more than they cost, but their success rate varies from year to year.
- C. When lawmakers establish income tax rates in order to generate a certain level of revenue, they do not allow adequately for revenue that will be lost through evasion.
- D. No one who routinely hides some taxable income can be induced by a lowering of tax rates to stop hiding such income unless fines for evaders are raised at the same time.
- E. Taxpayers do not differ from each other with respect to the rate of taxation that will cause them to evade taxes.
- 51. Because postage rates are rising, Home Decorator magazine plans to maximize its profits by reducing by one half the number of issues it publishes each year. The quality of articles, the number of articles published per year, and the subscription price will not change. Market research shows that neither subscribers nor advertisers will be lost if the magazine's plan is instituted. Which of the following, if true, provides the strongest evidence that the magazine's profits are likely to decline if the plan is instituted?
- A. With the new postage rates, a typical issue under the proposed plan would cost about one-third more to mail than a typical current issue would.
- B. The majority of the magazine's subscribers are less concerned about a possible reduction in the quantity of the magazine's articles than about a possible loss of the current high quality of its articles.
- C. Many of the magazine's long-time subscribers would continue their subscriptions even if the subscription price were increased.
- D. Most of the advertisers that purchase advertising space in the magazine will continue to spend the same amount on advertising per issue as they have in the past.
- E. Production costs for the magazine are expected to remain stable.
- 52. When three Everett-owned Lightning-built airplanes crashed in the same month, the Everett company ordered three new Lightning-built airplanes as replacements. This decision surprised many in the airline industry because, ordinarily when a product is involved in accidents, users become reluctant to buy that product. Which of the following, if true, provides the best indication that the Everett company's decision was logically well supported?
- A. Although during the previous year only one Lightning-built airplane crashed, competing manufacturers had a perfect safety record.
- B. The Lightning-built airplanes crashed due to pilot error, but because of the excellent quality of the planes there were many survivors.
- C. The Federal Aviation Association issued new guidelines for airlines in order to standardize safety requirements governing preflight inspections.
- D. Consumer advocates pressured two major airlines into purchasing safer airplanes so that the public would be safer while flying.
- E. Many Lightning Airplane Company employees had to be replaced because they found jobs with the competition.
- 53. Unlike the wholesale price of raw wool, the wholesale price of raw cotton has fallen considerably in the last year. Thus, although the retail price of cotton clothing at retail clothing stores has not yet fallen, it will inevitably fall. **Which of the following, if true, most seriously weakens the argument above?**
- A. The cost of processing raw cotton for cloth has increased during the last year.
- B. The wholesale price of raw wool is typically higher than that of the same volume of raw cotton.
- C. The operating costs of the average retail clothing store have remained constant during the last year.
- D. Changes in retail prices always lag behind changes in wholesale prices.
- E. The cost of harvesting raw cotton has increased in the last year.

- 54. The pharmaceutical industry argues that because new drugs will not be developed unless heavy development costs can be recouped in later sales, the current 20 years of protection provided by patents should be extended in the case of newly developed drugs. However, in other industries new-product development continues despite high development costs, a fact that indicates that the extension is unnecessary. Which of the following, if true, most strongly supports the pharmaceutical industry's argument against the challenge made above?
- A. No industries other than the pharmaceutical industry have asked for an extension of the 20-year limit on patent protection.
- B. Clinical trials of new drugs, which occur after the patent is granted and before the new drug can be marketed, often now take as long as 10 years to complete.
- C. There are several industries in which the ratio of research and development costs to revenues is higher than it is in the pharmaceutical industry.
- D. An existing patent for a drug does not legally prevent pharmaceutical companies from bringing to market alternative drugs, provided they are sufficiently dissimilar to the patented drug.
- E. Much recent industrial innovation has occurred in products—example, in the computer and electronics industries—which patent protection is often very ineffective.
- 55. The cotton farms of Country Q became so productive that the market could not absorb all that they produced. Consequently, cotton prices fell. The government tried to boost cotton prices by offering farmers who took 25 percent of their cotton acreage out of production direct support payments up to a specified maximum per farm. The government's program, if successful, will not be a net burden on the budget. Which of the following, if true, is the best basis for an explanation of how this could be so?
- A. Depressed cotton prices meant operating losses for cotton farms, and the government lost revenue from taxes on farm profits.
- B. Cotton production in several countries other than Q declined slightly the year that the support-payment program went into effect in Q.
- C. The first year that the support-payment program was in effect, cotton acreage in Q was 5% below its level in the base year for the program.
- D. The specified maximum per farm meant that for very large cotton farms the support payments were less per acre for those acres that were withdrawn from production than they were for smaller farms.
- E. Farmers who wished to qualify for support payments could not use the cotton acreage that was withdrawn from production to grow any other crop.
- 56. Robot satellites relay important communications and identify weather patterns. Because the satellites can be repaired only in orbit, astronauts are needed to repair them. Without repairs, the satellites would eventually malfunction. Therefore, space flights carrying astronauts must continue. Which of the following, if true, would most seriously weaken the argument above?
- A. Satellites falling from orbit because of malfunctions burn up in the atmosphere.
- B. Although satellites are indispensable in the identification of weather patterns, weather forecasters also make some use of computer projections to identify weather patterns.
- C. The government, responding to public pressure, has decided to cut the budget for space flights and put more money into social welfare programs.
- D. Repair of satellites requires heavy equipment, which adds to the amount of fuel needed to lift a spaceship carrying astronauts into orbit.
- E. Technical obsolescence of robot satellites makes repairing them more costly and less practical than sending new, improved satellites into orbit.
- 57. Since the deregulation of airlines, delays at the nation's increasingly busy airports have increased by 25 percent. To combat this problem, more of the takeoff and landing slots at the busiest airports must be allocated to commercial airlines. Which of the following, if true, casts the most doubt on the effectiveness of the solution proposed above?
- A. The major causes of delays at the nation's busiest airports are bad weather and overtaxed air traffic control equipment.
- B. Since airline deregulation began, the number of airplanes in operation has increased by 25 percent.
- C. Over 60 percent of the takeoff and landing slots at the nation's busiest airports are reserved for commercial
- D. After a small midwestern airport doubled its allocation of takeoff and landing slots, the number of delays that were reported decreased by 50 percent.
- E. Since deregulation the average length of delay at the nation's busiest airports has doubled.

- 58. The proposal to hire ten new police officers in Middletown is quite foolish. There is sufficient funding to pay the salaries of the new officers, but not the salaries of additional court and prison employees to process the increased caseload of arrests and convictions that new officers usually generate. Which of the following, if true, will most seriously weaken the conclusion drawn above?
- A. Studies have shown that an increase in a city's police force does not necessarily reduce crime.
- B. When one major city increased its police force by 19 percent last year, there were 40 percent more arrests and 13 percent more convictions.
- C. If funding for the new police officers' salaries is approved, support for other city services will have to be reduced during the next fiscal year.
- D. In most United States cities, not all arrests result in convictions, and not all convictions result in prison terms.
- E. Middletown's ratio of police officers to citizens has reached a level at which an increase in the number of officers will have a deterrent effect on crime.
- 59. Bank depositors in the United States are all financially protected against bank failure because the government insures all individuals' bank deposits. An economist argues that this insurance is partly responsible for the high rate of bank failures, since it removes from depositors any financial incentive to find out whether the bank that holds their money is secure against failure. If depositors were more selective, then banks would need to be secure in order to compete for depositors' money. Which of the following, if true, most seriously weakens the economist's argument?
- A. Before the government started to insure depositors against bank failure, there was a lower rate of bank failure than there is now.
- B. When the government did not insure deposits, frequent bank failures occurred as a result of depositors' fears of losing money in bank failures.
- C. Surveys show that a significant proportion of depositors are aware that their deposits are insured by the government.
- D. There is an upper limit on the amount of an individual's deposit that the government will insure, but very few individuals' deposits exceed this limit.
- E. The security of a bank against failure depends on the percentage of its assets that are loaned out and also on how much risk its loans involve.
- 60. Large national budget deficits do not cause large trade deficits. If they did, countries with the largest budget deficits would also have the largest trade deficits. In fact, when deficit figures are adjusted so that different countries are reliably comparable to each other, there is no such correlation. If the statements above are all true, which of the following can properly be inferred on the basis of them?
- A. Countries with large national budget deficits tend to restrict foreign trade.
- B. Reliable comparisons of the deficit figures of one country with those of another are impossible.
- C. Reducing a country's national budget deficit will not necessarily result in a lowering of any trade deficit that country may have.
- D. When countries are ordered from largest to smallest in terms of population, the smallest countries generally have the smallest budget and trade deficits.
- E. Countries with the largest trade deficits never have similarly large national budget deficits.
- 61. The more frequently employees take time to exercise during working hours each week, the fewer sick days they take. Even employees who exercise only once a week during working hours take less sick time than those who do not exercise. Therefore, if companies started fitness programs, the absentee rate in those companies would decrease significantly. Which of the following, if true, most seriously weakens the argument above?
- A. Employees who exercise during working hours occasionally fall asleep for short periods of time after they exercise.
- B. Employees who are frequently absent are the least likely to cooperate with or to join a corporate fitness program.
- C. Employees who exercise only once a week in their company's fitness program usually also exercise after work.
- D. Employees who exercise in their company's fitness program use their working time no more productively than those who do not exercise.
- E. Employees who exercise during working hours take slightly longer lunch breaks than employees who do not exercise.

- 62. Recently a court ruled that current law allows companies to reject a job applicant if working in the job would entail a 90 percent chance that the applicant would suffer a heart attack. The presiding judge justified the ruling, saying that it protected both employees and employers. The use of this court ruling as part of the law could not be effective in regulating employment practices if which of the following were true?
- A. The best interests of employers often conflict with the interests of employees.
- B. No legally accepted methods exist for calculating the risk of a job applicant's having a heart attack as a result of being employed in any particular occupation.
- C. Some jobs might involve health risks other than the risk of heart attack.
- D. Employees who have a 90 percent chance of suffering a heart attack may be unaware that their risk is so great.
- E. The number of people applying for jobs at a company might decline if the company, by screening applicants for risk of heart attack, seemed to suggest that the job entailed high risk of heart attack.
- 63. Guitar strings often go "dead"—become less responsive and bright in tone—after a few weeks of intense use. A researcher whose son is a classical guitarist hypothesized that dirt and oil, rather than changes in the material properties of the string, were responsible. Which of the following investigations is most likely to yield significant information that would help to evaluate the researcher's hypothesis?
- A. Determining if a metal alloy is used to make the strings used by classical guitarists
- B. Determining whether classical guitarists make their strings go dead faster than do folk guitarists
- C. Determining whether identical lengths of string, of the same gauge, go dead at different rates when strung on various brands of guitars
- D. Determining whether a dead string and a new string produce different qualities of sound
- E. Determining whether smearing various substances on new guitar strings causes them to go dead
- 64. To protect certain fledgling industries, the government of country Z banned imports of the types of products those industries were starting to make. As a direct result, the cost of those products to the buyers, several export-dependent industries in Z, went up, sharply limiting the ability of those industries to compete effectively in their export markets. Which of the following can be most properly inferred from the passage about the products whose importation was banned?
- A. Those products had been cheaper to import than they were to make within country Z's fledgling industries.
- B. Those products were the ones that country Z was hoping to export in its turn, once the fledgling industries matured.
- C. Those products used to be imported from just those countries to which country Z's exports went.
- D. Those products had become more and more expensive to import, which resulted in a foreign trade deficit just before the ban.
- E. Those products used to be imported in very small quantities, but they were essential to country Z's economy.
- 65. Treatment for hypertension forestalls certain medical expenses by preventing strokes and heart disease. Yet any money so saved amounts to only one-fourth of the expenditures required to treat the hypertensive population. Therefore, there is no economic justification for preventive treatment for hypertension. Which of the following, if true, is most damaging to the conclusion above?
- A. The many fatal strokes and heart attacks resulting from untreated hypertension cause insignificant medical expenditures but large economic losses of other sorts.
- B. The cost, per patient, of preventive treatment for hypertension would remain constant even if such treatment were instituted on a large scale.
- C. In matters of health care, economic considerations should ideally not be dominant.
- D. Effective prevention presupposes early diagnosis, and programs to ensure early diagnosis are costly.
- E. The net savings in medical resources achieved by some preventive health measures are smaller than the net losses attributable to certain other measures of this kind.
- 66. The sustained massive use of pesticides in farming has two effects that are especially pernicious. First, it often kills off the pests' natural enemies in the area. Second, it often unintentionally gives rise to insecticide-resistant pests, since those insects that survive a particular insecticide will be the ones most resistant to it, and they are the ones left to breed. From the passage above, it can be properly inferred that the effectiveness of the sustained massive use of pesticides can be extended by doing which of the following, assuming that each is a realistic possibility?
- A. Using only chemically stable insecticides
- B. Periodically switching the type of insecticide used
- C. Gradually increasing the quantities of pesticides used
- D. Leaving a few fields fallow every year
- E. Breeding higher-yielding varieties of crop plants

- 67. Transnational cooperation among corporations is experiencing a modest renaissance among United States firms, even though projects undertaken by two or more corporations under a collaborative agreement are less profitable than projects undertaken by a single corporation. The advantage of transnational cooperation is that such joint international projects may allow United States firms to win foreign contracts that they would not otherwise be able to win. Which of the following is information provided by the passage?
- A. Transnational cooperation involves projects too big for a single corporation to handle.
- B. Transnational cooperation results in a pooling of resources leading to high-quality performance.
- C. Transnational cooperation has in the past been both more common and less common than it is now among United States firms.
- D. Joint projects between United States and foreign corporations are not profitable enough to be worth undertaking.
- E. Joint projects between United States and foreign corporations benefit only those who commission the projects.
- 68. Leaders of a miners' union on strike against Coalco are contemplating additional measures to pressure the company to accept the union's contract proposal. The union leaders are considering as their principal new tactic a consumer boycott against Gasco gas stations, which are owned by Energy Incorporated, the same corporation that owns Coalco. The answer to which of the following questions is LEAST directly revelant to the union leaders' consideration of whether attempting a boycott of Gasco will lead to acceptance of their contract proposal?
- A. Would revenue losses by Gasco seriously affect Energy Incorporated?
- B. Can current Gasco customers easily obtain gasoline elsewhere?
- C. Have other miners' unions won contracts similar to the one proposed by this union?
- D. Have other unions that have employed a similar tactic achieved their goals with it?
- E. Do other corporations that own coal companies also own gas stations?

Assumptions Latest Questions

- 1. Until now, only injectable vaccines against influenza have been available. Parents are reluctant to subject children to the pain of injections, but adults, who are at risk of serious complications from influenza, are commonly vaccinated. A new influenza vaccine, administered painlessly in a nasal spray, is effective for children. However, since children seldom develop serious complications from influenza, no significant public health benefit would result from widespread vaccination of children using the nasal spray. Which of the following is an assumption on which the argument depends?
- A. Any person who has received the injectable vaccine can safely receive the nasal-spray vaccine as well.
- B. The new vaccine uses the same mechanism to ward off influenza as injectable vaccines do.
- C. The injectable vaccine is affordable for all adults.
- D. Adults do not contract influenza primarily from children who have influenza.
- E. The nasal spray vaccine is not effective when administered to adults.
- 2. Last year all refuse collected by Shelbyville city services was incinerated. This incineration generated a large quantity of residue ash. In order to reduce the amount of residue ash Shelbyville generates this year to half of last year's total, the city has revamped its collection program. This year city services will separate for recycling enough refuse to reduce the number of truckloads of refuse to be incinerated to half of last year's number. Which of the following is required for the revamped collection program to achieve its aim?
- A. This year, no materials that city services could separate for recycling will be incinerated.
- B. Separating recyclable materials from materials to be incinerated will cost Shelbyville less than half what it cost last year to dispose of the residue ash.
- C. Refuse collected by city services will contain a larger proportion of recyclable materials this year than it did last year.
- D. The refuse incinerated this year will generate no more residue ash per truckload incinerated than did the refuse incinerated last year.
- E. The total quantity of refuse collected by Shelbyville city services this year will be no greater than that collected last year.
- **3. Newspaper editorial**: In an attempt to reduce the crime rate, the governor is getting tough on criminals and making prison conditions harsher. Part of this effort has been to deny inmates the access they formerly had to college-level courses. However, this action is clearly counter to the governor's ultimate goal, since after being released form prison, inmates who had taken such courses committed far fewer crimes overall than other inmates. **Which of the following is an assumption on which the argument depends?**
- A. Not being able to take college-level courses while in prison is unlikely to deter anyone from a crime that he or she might otherwise have committed.
- B. Former inmates are no more likely to commit crimes than are members of the general population.
- C. The group of inmates who chose to take college-level courses were not already less likely than other inmates to commit crimes after being released.
- D. Taking high school level courses in prison has less effect on an inmate's subsequent behavior than taking college-level courses does.
- E. The governor's ultimate goal actually is to gain popularity by convincing people that something effective is being done about crime.

- **4.** Two centuries ago, Tufe Peninsula became separated form the mainland, isolating on the newly formed Tufe Island a population of Turfil sunflowers. This population's descendants grow to be, on average, 40 centimeters shorter than Turfil sunflowers found on the mainland. Tufe Island is significantly drier than Tufe Peninsula was. So the current average height of Tufe's Turfil sunflowers is undoubtedly at least partially attributable to changes in Tufe's environmental conditions. **Which of the following is an assumption on which the argument depends?**
- A. There are no types of vegetation on Tufe Island that are known to benefit from dry conditions.
- B. There were about as many Turfil sunflowers on Tufe Peninsula two centuries ago as there are on Tufe Island today.
- C. The mainland's environment has not changed in ways that have resulted in Turfil sunflowers on the mainland growing to be 40 centimeters taller than they did two centuries ago.
- D. The soil on Tufe Island, unlike that on the mainland, lacks important nutrients that help Turfil sunflowers survive and grow tall in a dry environment.
- E. The 40-centimeter height difference between the Turfil sunflowers on Tufe Island and those on the mainland is the only difference between the two populations.
- 5. The average hourly wage of television assemblers in Vernland has long been significantly lower than that in neighboring Borodia. Since Borodia dropped all tariffs on Vernlandian televisions three years ago, the number of televisions sold annually in Borodia has not changed. However, recent statistics show a droip in the number of television assemblers in Borodia. Therefore, updated trade statistics will probably indicate that the number of televisions Borodia imports annually from Vernland has increased. Which of the following is an assumption on which the argument depends?
- A. The number of television assemblers in Vernland has increased by at least as much as the number of television assemblers in Borodia has decreased.
- B. Televisions assembled in Vernland have features that televisions assembled in Borodia do not have.
- C. The average number of hours it takes a Borodian television assembler to assemble a television has not decreased significantly during the past three years.
- D. The number of televisions assembled annually in Vernland has increased significantly during the past three years.
- E. The difference between the hourly wage of television assemblers in Vernland and the hourly wage of television assemblers in Borodia is likely to decrease in the next few years.
- **6.** In Teruvia, the quantity of rice produced per year is currently just large enough to satisfy domestic demand. Teruvia's total rice acreage will not be expanded in the foreseeable future, nor will rice yields per acre increase appreciably. Teruvia's population, however, will be increasing significantly for years to come. Clearly, therefore, Teruvia will soon have to begin importing rice. **Which of the following is an assumption on which the argument depends?**
- A. No pronounced trend of decreasing per capita demand for rice is imminent in Teruvia.
- B. Not all of the acreage in Teruvia currently planted with rice is well suited to the cultivation of rice.
- C. None of the strains of rice grown in Teruvia are exceptionally high-yielding.
- D. There are no populated regions in Teruvia in which the population will not increase.
- E. There are no major crops other than rice for which domestic production and domestic demand are currently in balance in Teruvia.

- 7. In the past the country of Siduria has relied heavily on imported oil. Siduria recently implemented a program to convert heating systems from oil to natural gas. Siduria already produces more natural gas each year than it burns, and oil production in Sidurian oil fields is increasing at a steady pace. If these trends in fuel production and usage continue, therefore, Sidurian reliance on foreign sources for fuel should decline soon. Which of the following is an assumption on which the argument depends?
- A. In Siduria the rate of fuel consumption is rising no more quickly than the rate of fuel production.
- B. Domestic production of natural gas is rising faster than is domestic production of oil in Siduria.
- C. No fuel other than natural gas is expected to be used as a replacement for oil in Siduria.
- D. Buildings cannot be heated by solar energy rather than by oil or natural gas.
- E. All new homes that are being built will have natural-gas-burning heating systems.
- **8.** Three large companies and seven small companies currently manufacture a product with potential military applications. If the government regulates the industry, it will institute a single set of manufacturing specifications to which all ten companies will have to adhere. In this case, therefore, since none of the seven small companies can afford to convert their production lines to a new set of manufacturing specifications, only the three large companies will be able to remain in business. **Which of the following is an assumption on which the author's argument relies?**
- A. None of the three large companies will go out of business if the government does not regulate the manufacture of the product.
- B. It would cost more to convert the production lines of the small companies to a new set of manufacturing specifications than it would to convert the production lines of the large companies.
- C. Industry lobbyists will be unable to dissuade the government from regulating the industry.
- D. Assembly of the product produced according to government manufacturing specifications would be more complex than current assembly procedures.
- E. None of the seven small companies currently manufactures the product to a set of specifications that would match those the government would institute if the industry were to be regulated.
- **9.** Exposure to certain chemicals commonly used in elementary schools as cleaners or pesticides causes allergic reactions in some children. Elementary school nurses in Renston report that the proportion of schoolchildren sent to them for treatment of allergic reactions to those chemicals has increased significantly over the past ten years. Therefore, either Renston's schoolchildren have been exposed to greater quantities of the chemicals, or they are more sensitive to them than schoolchildren were ten years ago. **Which of the following is an assumption on which the argument depends?**
- A. The number of school nurses employed by Renston's elementary schools has not decreased over the past ten years.
- B. Children who are allergic to the chemicals are no more likely than other children to have allergies to other substances.
- C. Children who have allergic reactions to the chemicals are not more likely to be sent to a school nurse now than they were ten years ago.
- D. The chemicals are not commonly used as cleaners or pesticides in houses and apartment buildings in Renston.
- E. Children attending elementary school do not make up a larger proportion of Renston's population now than they did ten years ago.

- 10. A significant number of complex repair jobs carried out by Ace Repairs have to be reworked under the company's warranty. The reworked jobs are invariably satisfactory. When initial repairs are inadequate, therefore, it is not because the mechanics lack competence; rather, there is clearly a level of focused concentration that complex repairs require that is elicited more reliably by rework jobs than by first-time jobs. The argument above assumes which of the following?
- A. There is no systematic difference in membership between the group of mechanics who do first-time jobs and the group of those who do rework jobs.
- B. There is no company that successfully competes with Ace Repairs for complex repair jobs.
- C. Ace Repairs' warranty is good on first-time jobs but does not cover rework jobs.
- D. Ace Repairs does not in any way penalize mechanics who have worked on complex repair jobs that later had to be reworked.
- E. There is no category of repair jobs in which Ace Repairs invariably carries out first-time jobs satisfactorily.
- 11. With a record number of new companies starting up in Derderia, and with previously established companies adding many new jobs, a record number of new jobs were created last year in the Derderian economy. This year, previously established companies will not be adding as many new jobs overall as such companies added last year. Therefore, unless a record number of companies start up this year, Derderia will not break its record for new jobs created. Which of the following is an assumption on which the argument relies?
- A. In a given year, new companies starting up create more new jobs on average than do previously established companies.
- B. The number of people seeking employment is no larger this year than it was last year.
- C. This year, the new companies starting up will not provide substantially more jobs per company than did new companies last year.
- D. Previously established companies in Derderia will be less profitable this year than such companies were last year.
- E. The number of jobs created in the Derderian economy last year was substantially larger than the number of jobs lost.
- 12. When storing Renaissance oil paintings, museums conform to standards that call for careful control of the surrounding temperature and humidity, with variations confined within narrow margins. Maintaining this environment is very costly, and recent research shows that even old oil paint is unaffected by wide fluctuations in temperature and humidity. Therefore, museums could relax their standards and save money without endangering their Renaissance oil paintings. Which of the following is an assumption on which the argument depends?
- A. Renaissance paintings were created in conditions involving far greater fluctuations in temperature and humidity than those permitted by current standards.
- B. Under the current standards that museums use when storing Renaissance oil paintings, those paintings do not deteriorate at all.
- C. Museum collections typically do not contain items that are more likely to be vulnerable to fluctuations in temperature and humidity than Renaissance oil paintings.
- D. None of the materials in Renaissance oil paintings other than the paint are vulnerable enough to relatively wide fluctuations in temperature and humidity to cause damage to the paintings.
- E. Most Renaissance oil paintings are stored in museums located in regions near the regions where the paintings were created.

13. For similar cars and drivers, automobile insurance for collision damage has always cost more in Greatport than in Fairmont. Police studies, however, show that cars owned by Greatport residents are, on average, slightly less likely to be involved in a collision than cars in Fairmont. Clearly, therefore, insurance companies are making a greater profit on collision-damage insurance in Greatport than in Fairmont.

Which of the following is an assumption on which the argument depends?

- A. Repairing typical collision damage does not cost more in Greatport than in Fairmont.
- B. There are no more motorists in Greatport than in Fairmont.
- C. Greatport residents who have been in a collision are more likely to report it to their insurance company than Fairmont residents are.
- D. Fairmont and Greatport are the cities with the highest collision-damage insurance rates.
- E. The insurance companies were already aware of the difference in the likelihood of collisions before the publication of the police reports.
- 14. Agricultural societies cannot exist without staple crops. Several food plants, such as kola and okra, are known to have been domesticated in western Africa, but they are all supplemental, not staple, foods. All the recorded staple crops grown in western Africa were introduced from elsewhere, beginning, at some unknown date, with rice and yams. Therefore, discovering when rice and yams were introduced into western Africa would establish the earliest date at which agricultural societies could have arisen there. Which of the following is an assumption on which the argument depends?
- A. People in western Africa did not develop staple crops that they stopped cultivating once rice and yams were introduced.
- B. There are no plants native to western Africa that, if domesticated, could serve as staple food crops.
- C. Rice and yams were grown as staple crops by the earliest agricultural societies outside of western Africa.
- D. Kola and okra are better suited to growing conditions in western Africa than domesticated rice and yams are.
- E. Kola and okra were domesticated in western Africa before rice and yams were introduced there.
- **15.** In the year following an eight-cent increase in the federal tax on a pack of cigarettes, sales of cigarettes fell ten percent. In contrast, in the year prior to the tax increase, sales had fallen one percent. The volume of cigarette sales is therefore strongly related to the after-tax price of a pack of cigarettes. **The argument above requires which of following assumptions?**
- A. During the year following the tax increase, the pretax price of a pack of cigarettes did not increase by as much as it had during the year prior to the tax increase.
- B. The one percent fall in cigarette sales in the year prior to tax increase was due to a smaller tax increase.
- C. The pretax price of a pack of cigarettes gradually decreased throughout the year before and the year after the tax increase.
- D. For the year following the tax increase, the pretax price of a pack of cigarettes was not eight or more cents lower than it had been the previous year.
- E. As the after-tax price of a pack of cigarettes rises, the pretax price also rises.

- 16. In Kravonia, the average salary for jobs requiring a college degree has always been higher than the average salary for jobs that do not require a degree. Current enrollments in Kravonia's colleges indicate that over the next four years the percentage of the Kravonian workforce with college degrees will increase dramatically. Therefore, the average salary for all workers in Kravonia is likely to increase over the next four years. Which of the following is an assumption on which the argument depends?
- A. Kravonians with more than one college degree earn more, on average, than do Kravonians with only one college degree.
- B. The percentage of Kravonians who attend college in order to earn higher salaries is higher now than it was several years ago.
- C. The higher average salary for jobs requiring a college degree is not due largely to a scarcity among the Kravonian workforce of people with a college degree.
- D. The average salary in Kravonia for jobs that do not require a college degree will not increase over the next four years.
- E. Few members of the Kravonian workforce earned their degrees in other countries.
- 17. For most people, the left half of the brain controls linguistic capabilities, but some people have their language centers in the right half. When a language center of the brain is damaged, for example by a stroke, linguistic capabilities are impaired in some way. Therefore, people who have suffered a serious stroke on the left side of the brain without suffering any such impairment must have their language centers in the right half. Which of the following is an assumption on which the reasoning in the argument above depends?
- A. No part of a person's brain that is damaged by a stroke ever recovers.
- B. Impairment of linguistic capabilities does not occur in people who have not suffered any damage to any language center of the brain.
- C. Strokes tend to impair linguistic capabilities more severely than does any other cause of damage to language centers in the brain.
- D. If there are language centers on the left side of the brain, any serious stroke affecting that side of the brain damages at least one of them.
- E. It is impossible to determine which side of the brain contains a person's language centers if the person has not suffered damage to either side of the brain.
- 18. The Earth's rivers constantly carry dissolved salts into its oceans. Clearly, therefore, by taking the resulting increase in salt levels in the oceans over the past hundred years and then determining how many centuries of such increases it would have taken the oceans to reach current salt levels from a hypothetical initial salt-free state, the maximum age of the Earth's oceans can be accurately estimated. Which of the following is an assumption on which the argument depends?
- A. The quantities of dissolved salts deposited by rivers in the Earth's oceans have not been unusually large during the past hundred years.
- B. At any given time, all the Earth's rivers have about the same salt levels.
- C. There are salts that leach into the Earth's oceans directly from the ocean floor.
- D. There is no method superior to that based on salt levels for estimating the maximum age of the Earth's oceans.
- E. None of the salts carried into the Earth's oceans by rivers are used up by biological activity in the oceans.

- 19. In a certain wildlife park, park rangers are able to track the movements of many rhinoceroses because those animals wear radio collars. When, as often happens, a collar slips off, it is put back on. Putting a collar on a rhinoceros involves immobilizing the animal by shooting it with a tranquilizer dart. Female rhinoceroses that have been frequently recollared have significantly lower fertility rates than uncollared females. Probably, therefore, some substance in the tranquilizer inhibits fertility. Which of the following is an assumption on which the argument depends?
- A. The dose of tranquilizer delivered by a tranquilizer dart is large enough to give the rangers putting collars on rhinoceroses a generous margin of safety.
- B. The fertility rate of uncollared female rhinoceroses in the park has been increasing in the past few decades.
- C. Any stress that female rhinoceroses may suffer as a result of being immobilized and handled has little or no negative effect on their fertility.
- D. The male rhinoceroses in the wildlife park do net lose their collars as often as the park's female rhinoceroses do.
- E. The tranquilizer used in immobilizing rhinoceroses is the same as the tranquilizer used in working with other large mammals.
- **20.** Frobisher, a sixteenth-century English explorer, had soil samples from Canada's Kodlunarn Island examined for gold content. Because high gold content was reported, Elizabeth I funded two mining expeditions. Neither expedition found any gold there. Modern analysis of the island's soil indicates a very low gold content. Thus the methods used to determine the gold content of Frobisher's samples must have been inaccurate. **Which of the following is an assumption on which the argument depends?**
- A. The gold content of the soil on Kodlunarn Island is much lower today than it was in the sixteenth century.
- B. The two mining expeditions funded by Elizabeth I did not mine the same part of Kodlunarn Island.
- C. The methods used to assess gold content of the soil samples provided by Frobisher were different from those generally used in the sixteenth century.
- D. Frobisher did not have soil samples from any other Canadian island examined for gold content.
- E. Gold was not added to the soil samples collected by Frobisher before the samples were examined.
- 21. In response to mounting public concern, an airplane manufacturer implemented a program with the well-publicized goal of reducing by half the total yearly amount of hazardous waste generated by its passenger-jet division. When the program began in 1994, the division's hazardous waste output was 90 pounds per production worker; last year it was 40 pounds per production worker. Clearly, therefore, charges that the manufacturer's program has not met its goal are false. Which of the following is an assumption on which the argument depends?
- A. The amount of nonhazardous waste generated each year by the passenger-jet division has not increased significantly since 1994.
- B. At least as many passenger jets were produced by the division last year as had been produced in 1994.
- C. Since 1994, other divisions in the company have achieved reductions in hazardous waste output that are at least equal to that achieved in the passenger-jet division.
- D. The average number of weekly hours per production worker in the passenger-jet division was not significantly greater last year than it was in 1994.
- E. The number of production workers assigned to the passenger-jet division was not significantly less in 1994 than it was last year.

- 22. The milk of many mammals contains cannabinoids, substances that are known to stimulate certain receptors in the brain. To investigate the function of cannabinoids, researchers injected newborn mice with a chemical that is known to block cannabinoids from reaching their receptors in the brain. The injected mice showed far less interest in feeding than normal newborn mice do. Therefore, cannabinoids probably function to stimulate the appetite. Which of the following is an assumption on which the argument depends?
- A. Newborn mice do not normally ingest any substance other than their mothers' milk.
- B. Cannabinoids are the only substances in mammals' milk that stimulate the appetite.
- C. The mothers of newborn mice do not normally make any effort to encourage their babies to feed.
- D. The milk of mammals would be less nutritious if it did not contain cannabinoids.
- E. The chemical that blocks cannabinoids from stimulating their brain receptors does not independently inhibit the appetite.
- 23. In 1992 outlaw fishing boats began illegally harvesting lobsters from the territorial waters of the country of Belukia. Soon after, the annual tonnage of lobster legally harvested in Belukian waters began declining; in 1996, despite there being no reduction in the level of legal lobster fishing activity, the local catch was 9,000 tons below pre-1992 levels. It is therefore highly likely that the outlaw fishing boats harvested about 9,000 tons of lobster illegally that year. Which of the following is an assumption on which the argument depends?
- A. The illegal lobster harvesting was not so extensive that the population of catchable lobsters in Belukia's territorial waters had sharply declined by 1996.
- B. The average annual lobster catch, in tons, of an outlaw fishing boat has increased steadily since 1992.
- C. Outlaw fishing boats do not, as a group, harvest more lobsters than do licensed lobster-fishing boats.
- D. The annual legal lobster harvest in Belukia in 1996 was not significantly less than 9,000 tons.
- E. A significant proportion of Belukia's operators of licensed lobster-fishing boats went out of business between 1992 and 1996.
- 24. Tourists have long complained that hotel accommodations in Midville are too expensive. Starting last year, the city council, hoping to attract more tourists, lowered the hotel tax rate to 5 percent of room charges. By the end of last year, Midville had taken in no less money from hotel taxes than it did the year before, so an examination of the hotel records will show that more tourists stayed in city hotels last year than the year before. Which of the following is an assumption on which the argument depends?
- A. The tourists who stayed in Midville hotels last year were aware that the hotel tax rate had been lowered.
- B. The average price of hotel accommodations in Midville was not significantly higher than in hotels in other cities either last year or the year before.
- C. The average length of a tourist's stay in Midville hotels was not longer last year than it had been the year before.
- D. There were significantly more efforts to publicize Midville as a tourist destination last year than there had been the year before.
- E. On average, tourists in Midville did not spend significantly more on meals last year than they did on hotels accommodations.

- 25. Because it was long thought that few people would watch lengthy televised political messages, most televised political advertisements, like commercial advertisements, took the form of short messages. Last year, however, one candidate produced a half-hour-long advertisement. During the half hour the advertisement was aired, a substantial portion of the viewing public tuned into the advertisement. Clearly, then, many more people are interested in watching lengthy televised political messages than was previously thought. Which of the following is an assumption on which the argument depends?
- A. The candidate's ratings improved significantly as a result of the half-hour-long political advertisement.
- B. Political advertisements have become increasingly influential in determining voters' decisions at the polls.
- C. Many people would appreciate the opportunity to become better acquainted with political candidates' views on current political issues.
- D. Most people who are interested in political issues watch television regularly.
- E. Most of the viewers who tuned in to the candidate's half-hour-long advertisement last year did not change channels after the first few minutes.
- 26. Because ethylene dibromide, a chemical used to fumigate grain, was blamed for the high rate of nerve damage suffered by people who work in grain-processing plants, many such plants switched to other chemical fumigants two years ago. Since then, however, the percentage of workers at these plants who were newly diagnosed with nerve damage has not dropped significantly. Therefore, either ethylene dibromide was wrongly blamed or else the new chemicals also cause nerve damage. Which of the following is an assumption on which the argument depends?
- A. If the new chemicals cause nerve damage, the nerve damage caused would be different from any nerve damage that ethylene dibromide may cause.
- B. There are no chemical fumigants that are completely safe for workers in grain-processing plants.
- C. If ethylene dibromide causes nerve damage, it does not take two years or longer for that damage to become detectable.
- D. Workers at grain-processing plants typically continue to work there even after being diagnosed with nerve damage.
- E. Workers at grain-processing plants that still use ethylene dibromide continue to have a high rate of nerve damage.
- 27. Many people suffer an allergic reaction to certain sulfites, including those that are commonly added to wine as preservatives. However, since there are several wine makers who add sulfites to none of the wines they produce, people who would like to drink wine but are allergic to sulfites can drink wines produced by these wine makers without risking an allergic reaction to sulfites. Which of the following is an assumption on which the argument depends?
- A. These wine makers have been able to duplicate the preservative effect produced by adding sulfites by means that do not involve adding any potentially allergenic substances to their wine.
- B. Not all forms of sulfite are equally likely to produce the allergic reactions.
- C. Wine is the only beverage to which sulfites are commonly added.
- D. Apart from sulfites, there are no substances commonly present in wine that give rise to an allergic reaction.
- E. Sulfites are not naturally present in the wines produced by these wine makers in amounts large enough to produce an allergic reaction in someone who drinks these wines.

- 28. Most household appliances use electricity only when in use. Many microwave ovens, however, have built-in clocks and so use some electricity even when they are not in use. The clocks each consume about 45 kilowatt-hours per year. Therefore, households whose microwave oven has no built-in clock use 45 kilowatt-hours per year less, on average, than do comparable households whose microwave oven is otherwise similar but has a built-in clock. Which of the following is an assumption on which the argument depends?
- A. Households that do not have a microwave oven use less energy per year, on average, than do households that have a microwave oven.
- B. Microwave ovens with a built-in clock do not generally cost more to buy than microwave ovens without a built-in clock.
- C. All households that have a microwave oven also have either a gas oven or a conventional electric oven.
- D. Households whose microwave oven does not have a built-in clock are no more likely to have a separate electric clock plugged in than households whose microwave oven has one.
- E. There are more households that have a microwave oven with a built-in clock than there are households that have a microwave oven without a built-in clock.
- **29. Lawmaker:** Raising taxes is not the only means of reducing government debt. The government's stockpile of helium is worth 25 percent more, at current market prices, than the debt accumulated in acquiring and storing it. Therefore, by selling the helium, the government can not only pay off that debt but reduce its overall debt as well. **Which of the following is an assumption on which the argument depends?**
- A. The government has no current need for helium.
- B. Twenty-five percent of the debt the government has accumulated in stockpiling helium is not an insignificant portion of the government's total debt.
- C. It is not in the lawmaker's interest to advocate raising taxes as a means of reducing government debt.
- D. Attempts to sell the government's helium will not depress the market price of helium by more than 25 percent.
- E. The government will not incur any costs in closing its facilities for stockpiling helium.
- **30.** Early in the twentieth century, Lake Konfa became very polluted. Recently fish populations have recovered as release of industrial pollutants has declined and the lake's waters have become cleaner. Fears are now being voiced that the planned construction of an oil pipeline across the lake's bottom might revive pollution and cause the fish population to decline again. However, a technology for preventing leaks is being installed. Therefore, provided this technology is effective, those fears are groundless. **The argument depends on assuming which of the following?**
- A. Apart from development related to the pipeline, there will be no new industrial development around the lake that will create renewed pollution in its waters.
- B. Other than the possibility of a leak, there is no realistic pollution threat posed to the lake by the pipeline's construction.
- C. There is no reason to believe that the leak-preventing technology would be ineffective when installed in the pipeline in Lake Konfa.
- D. Damage to the lake's fish populations would be the only harm that a leak of oil from the pipeline would cause.
- E. The species of fish that are present in Lake Konfa now are the same as those that were in the lake before it was affected by pollution.

- **31.** In the past, every ten-percentage-point increase in cigarette prices in the country of Coponia has decreased per capita sales of cigarettes by four percent. Coponia is about to raise taxes on cigarettes by 9 cents per pack. The average price of cigarettes in Coponia is and has been for more than a year 90 cents per pack. So the tax hike stands an excellent chance of reducing per capita sales of cigarettes by four percent. **Which of the following is an assumption on which the argument depends?**
- A. Tobacco companies are unlikely to reduce their profit per pack of cigarettes to avoid an increase in the cost per pack to consumers in Coponia.
- B. Previous increases in cigarette prices in Coponia have generally been due to increases in taxes on cigarettes.
- C. Any decrease in per capita sales of cigarettes in Coponia will result mainly from an increase in the number of people who quit smoking entirely.
- D. At present, the price of a pack of cigarettes in Coponia includes taxes that amount to less than ten percent of the total selling price.
- E. The number of people in Coponia who smoke cigarettes has remained relatively constant for the past several years.
- 32. Personnel officer: The exorbitant cost of our health-insurance benefits reflects the high dollar amount of medical expenses incurred by our employees. Employees who are out of shape, as a group, have higher doctor bills and longer hospital stays than do their colleagues who are fit. Therefore, since we must reduce our health-insurance costs, we should offer a rigorous fitness program of jogging and weight lifting to all employees, and require employees who are out of shape to participate. The conclusion reached by the personnel officer depends on which of the following assumptions?
- A. A person who is fit would receive a routine physical checkup by a doctor less regularly than would a person who is out of shape.
- B. The medical expenses incurred by employees who are required to participate in the fitness program would be less than those incurred by employees who are not required to participate.
- C. The strenuous activities required of out-of-shape employees by the program would not by themselves generate medical expenses greater than any reduction achieved by the program.
- D. The fitness program would serve more employees who are out of shape than it would employees who are fit.
- E. The employees who participate in the fitness program would be away from work because of illness less than would the employees who do not participate.
- **33.** The ancient Nubians inhabited an area in which typhus occurred, yet surprisingly few of their skeletons show the usual evidence of this disease. The skeletons do show deposits of tetracycline, an antibiotic produced by a bacterium common in Nubian soil. This bacterium can flourish on the dried grain used for making two staples of the Nubian diet, beer and bread. Thus, tetracycline in their food probably explains the low incidence of typhus among ancient Nubians. **Which of the following is an assumption on which the argument relies?**
- A. The tetracycline deposits did not form after the bodies were buried.
- B. The diseases other than typhus to which the ancient Nubians were exposed would not be affected by tetracycline.
- C. Typhus is generally fatal.
- D. Nubian grain became contaminated with tetracycline-producing bacteria prior to being harvested.
- E. Bread and beer were the only foods eaten by the ancient Nubians which could have contained tetracycline.

- **34.** The ancient Nubians inhabited an area in which typhus occurs, yet surprisingly few of their skeletons show the usual evidence of this disease. The skeletons do show deposits of tetracycline, an antibiotic produced by a bacterium common in Nubian soil. This bacterium can flourish on the dried grain used for making two staples of the Nubian diet, beer and bread. Thus, tetracycline in their food probably explains the low incidence of typhus among ancient Nubians. **Which of the following is an assumption on which the argument relies?**
- A. Infectious diseases other than typhus to which the ancient Nubians were exposed are unaffected by tetracycline.
- B. Tetracycline is not rendered ineffective as an antibiotic by exposure to the processes involved in making bread and beer.
- C. Typhus cannot be transmitted by ingesting bread or beer contaminated with the infectious agents of this disease.
- D. Bread and beer were the only items in the diet of the ancient Nubians which could have contained tetracycline.
- E. Typhus is generally fatal.
- **35.** In Brindon County, virtually all of the fasteners—such as nuts, bolts, and screws—used by workshops and manufacturing firms have for several years been supplied by the Brindon Bolt Barn, a specialist wholesaler. In recent months many of Brindon County's workshops and manufacturing firms have closed down, and no new ones have opened. Therefore, the Brindon Bolt Barn will undoubtedly show a sharp decline in sales volume and revenue for this year as compared to last year. **The argument depends on assuming which of the following?**
- A. Last year the Brindon Bolt Barn's sales volume and revenue were significantly higher than they had been the previous year.
- B. The workshops and manufacturing firms that have remained open have a smaller volume of work to do this year than they did last year.
- C. Soon the Brindon Bolt Barn will no longer be the only significant supplier of fasteners to Brindon County's workshops.
- D. The Brindon Bolt Barn's operating expenses have not increased this year.
- E. The Brindon Bolt Barn is not a company that gets the great majority of its business from customers outside Brindon County.
- **36. Educational Theorist:** Recent editorials have called for limits on the amount of homework assigned to children. They point out that free-time activities play an important role in childhood development and that large amounts of homework reduce children's free time, hindering their development. But the average homework time for a ten year old, for example, is little more than 30 minutes per night. Clearly, therefore, there is no need to impose the limits these editorials are calling for. **Which of the following is an assumption on which the educational theorist's argument relies?**
 - A. The free-time activities that ten year olds engage in most are all approximately equally effective at fostering development
 - B. Regularly doing homework assignments improves children's academic performance.
 - C. Individual teachers are not the best judges of how much homework to assign the children they teach
 - D. In most schools, if not all, the homework assignments given are of a length that does not diverge widely from the average.
 - E. Free-time activities rarely teach children skills or information that they can use in their academic work.

- **37.** Political advocacy groups have begun to use information services to disseminate information that is then accessed by the public via personal computer. Since many groups are thus able to bypass traditional news sources, whose reporting is selective, and to present their political views directly to the public, information services present a more balanced picture of the complexities of political issues than any traditional news source presents. **Which of the following is an assumption on which the argument above depends?**
- A. Information services are accessible to enough people to ensure that political advocacy groups can use these services to reach as large a percentage of the public as they could through traditional news sources.
- B. People could get a thorough understanding of a particular political issue by sorting through information provided by several traditional news sources, each with differing editorial biases.
- C. Information on political issues disseminated through information services does not come almost entirely from advocacy groups that share a single bias.
- D. Traditional news sources seldom report the views of political advocacy groups accurately.
- E. Most people who get information on political issues from newspapers and other traditional news sources can readily identify the editorial biases of those sources.
- **38.** Radio stations with radio data system (RDS) technology broadcast special program information that only radios with an RDS feature can receive. Between 1994 and 1996, the number of RDS radio stations in Verdland increased from 250 to 600. However, since the number of RDS-equipped radios in Verdland was about the same in 1996 as in 1994, the number of Verdlanders receiving the special program information probably did not increase significantly. **Which of the following is an assumption on which the argument depends?**
- A. Few if any of the RDS radio stations that began broadcasting in Verdland after 1994 broadcast to people with RDS-equipped radios living in areas not previously reached by RDS stations.
- B. In 1996 most Verdlanders who lived within the listening area of an RDS station already had a radio equipped to receive RDS.
- C. Equipping a radio station with RDS technology does not decrease the station's listening area.
- D. In 1996 Verlanders who did not own radios equipped to receive RDS could not receive any programming from the RDS radio stations that began broadcasting in Verdland after 1994.
- E. The RDS radio stations in Verdland in 1996 did not all offer the same type of programming.
- **39.** Excavations of the Roman city of Sepphoris have uncovered numerous detailed mosaics depicting several readily identifiable animal species: a hare, a partridge, and various Mediterranean fish. Oddly, most of the species represented did not live in the Sepphoris region when these mosaics were created. Since identical motifs appear in mosaics found in other Roman cities, however, the mosaics of Sepphoris were very likely created by traveling artisans from some other part of the Roman Empire. **Which of the following is an assumption on which the argument depends?**
- A. The Sepphoris mosaics are not composed exclusively of types of stones found naturally in the Sepphoris area
- B. There is no single region to which all the species depicted in the Sepphoris mosaics are native
- C. No motifs appear in the Sepphoris mosaics that do not also appear in the mosaics of some other Roman city
- D. All of the animal figures in the Sepphoris mosaics are readily identifiable as representation of known species
- E. There was not a common repertory of mosaic designs with which artisans who lived in various parts of the Roman empire were familiar

- 40. The higher the level of certain vitamins and minerals in the bloodstream, the better a person's lungs function, as measured by the amount of air the person can expel in one second. The lung function of smokers is significantly worse, on average, than that of nonsmokers. Clearly, therefore, one way for smokers to improve their lung function is for them to increase their intake of foods that are rich in these helpful vitamins and minerals. Which of the following is an assumption on which this argument depends?
- A. Smokers are less likely than nonsmokers to have diets that are rich in vitamins and minerals
- B. The lung function of smokers whose diet are rich in those vitamins and minerals is generally better than that of nonsmokers with comparable diets
- C. People whose diets are deficient in those vitamins and minerals do not typically have other health problems in addition to diminished lung function
- D. Stopping smoking will not typically improve lung function more than any diet changes can
- E. Smoking does not introduce into the body chemicals that prevent the helpful vitamins and minerals from entering the bloodstream

Boldface Latest Questions

- 41.A product that represents a clear technological advance over competing products can generally command a high price. Because **technological advances tend to be quickly surpassed** and companies want to make large profits while they still can, many companies charge the greatest price the market will bear when they have such a product. But **large profits on the new product will give competitors a strong incentive to quickly match the new product's capabilities.** Consequently, the strategy to maximize overall profit from a new product is to charge less than the greatest possible price. In the argument above, the two portions in **boldface** play which of the following roles?
- A. The first is an assumption that forms the basis for a course of action that the argument criticizes; the second presents the course of action endorsed by the argument.
- B. The first is a consideration raised to explain the appeal of a certain strategy; the second is a consideration raised to call into question the wisdom of adopting that strategy.
- C. The first is an assumption that has been used to justify a certain strategy; the second is a consideration that is used to cast doubt on that assumption.
- D. The first is a consideration raised in support of a strategy the argument endorses; the second presents grounds in support of that consideration.
- E. The first is a consideration raised to show that adopting a certain strategy is unlikely to achieve the intended effect; the second is presented to explain the appeal of that strategy.
- 42. City Official: At City Hospital, uninsured patients tend to have shorter stays and fewer procedures performed than do insured patients, even though insured patients, on average, have slightly less serious medical problems at the time of admission to the hospital than uninsured patients have. Critics of the hospital have concluded that the uninsured patients are mot receiving proper medical care. However, this conclusion is almost certainly false. Careful investigation has recently shown two things: insured patients have much longer stays in the hospital than necessary, and they tend to have more procedures performed than are medically necessary. In the city official's argument, the two boldface portions play which of the following roles?
- A. The first states the conclusion of the city official's argument; the second provides support for that conclusion.
- B. The first is used to support the conclusion of the city official's argument; the second states that conclusion.
- C. The first was used to support the conclusion drawn by hospital critics; the second states the position that the city official's argument opposes.
- D. The first was used to support the conclusion drawn by hospital critics; the second provides support for the conclusion of the city official's argument.
- E. The first states the position that the city official's argument opposes; the second states the conclusion of the city official's argument.

- **43.** Environmental organizations want to preserve the land surrounding the Wilgrinn Wilderness Area from residential development. They plan to do this by purchasing that land from the farmers who own it. That plan is ill-conceived: if the farmers did sell their land, they would sell it to the highest bidder, and developers would outbid any other bidders. On the other hand, these farmers will never actually sell any of the land, provided that farming it remains viable. But farming will not remain viable if the farms are left unmodernized, and most of the farmers lack the financial resources modernization requires. And that is exactly why a more sensible preservation strategy would be to assist the farmers to modernize their farms to the extent needed to maintain viability. In the argument as a whole, the two boldface proportions play which of the following roles?
- A. The first presents a goal that the argument rejects as ill-conceived; the second is evidence that is presented as grounds for that rejection.
- B. The first presents a goal that the argument concludes cannot be attained; the second is a reason offered in support of that conclusion.
- C. The first presents a goal that the argument concludes can be attained; the second is a judgment disputing that conclusion.
- D. The first presents a goal, strategies for achieving which are being evaluated in the argument; the second is a judgment providing a basis for the argument's advocacy of a particular strategy.
- E. The first presents a goal that the argument endorses; the second presents a situation that the argument contends must be changed if that goal is to be met in the foreseeable future.
- 44. Historian: In the Drindian Empire, censuses were conducted annually to determine the population of each village. Village census records for the last half of the 1600's are remarkably complete. This very completeness makes one point stand out; in five different years, villages overwhelmingly reported significant population declines. Tellingly, each of those five years immediately followed an increase in a certain Drindian tax. This tax, which was assessed on villages, was computed by the central government using the annual census figures. Obviously, whenever the tax went up, villages had an especially powerful economic incentive to minimize the number of people they recorded; and concealing the size of a village's population from government census takers would have been easy. Therefore, it is reasonable to think that the reported declines did not happen. In the historian's argument, the two portions in boldface play which of the following roles?
- A. The first supplies a context for the historian's argument; the second acknowledges a consideration that has been used to argue against the position the historian seeks to establish.
- B. The first presents evidence to support the position that the historian seeks to establish; the second acknowledges a consideration that has been used to argue against that position.
- C. The first provides a context for certain evidence that supports the position that the historian seeks to establish; the second is that position.
- D. The first is a position for which the historian argues; the second is an assumption that serves as the basis of that argument.
- E. The first is an assumption that the historian explicitly makes in arguing for a certain position; the second acknowledges a consideration that calls that assumption into question.

- 45. Scientists typically do their most creative work before the age of forty. It is commonly thought that this happens because aging by itself brings about a loss of creative capacity. However, studies show that a disproportionately large number of the scientists who produce highly creative work beyond the age of forty entered their field at an older age than is usual. Since by the age of forty the large majority of scientists have been working in their field for at least fifteen years, the studies' finding strongly suggests that the real reason why scientists over forty rarely produce highly creative work is not that they have simply aged but rather that they generally have spent too long in a given field. In the argument given, the two portions in boldface play which of the following roles?
- A. The first is the position that the argument as a whole opposes; the second is an objection that has been raised against a position defended in the argument.
- B. The first is a claim that has been advanced in support of a position that the argument opposes; the second is a finding that has been used in support of that position.
- C. The first is an explanation that the argument challenges; the second is a finding that has been used in support of that explanation.
- D. The first is an explanation that the argument challenges; the second is a finding on which that challenge is based.
- E. The first is an explanation that the argument defends; the second is a finding that has been used to challenge that explanation.
- 46. Historian: Newton developed mathematical concepts and techniques that are fundamental to modern calculus. Leibniz developed closely analogous concepts and techniques. It has traditionally been thought that these discoveries were independent. Researchers have, however, recently discovered notes of Leibniz' that discuss one of Newton's books on mathematics. Several scholars have argued that since the book includes a presentation of Newton's calculus concepts and techniques, and since the notes were written before Leibniz' own development of calculus concepts and techniques, it is virtually certain that the traditional view is false. A more cautious conclusion than this is called for, however. Leibniz' notes are limited to early sections of Newton's book, sections that precede the ones in which Newton's calculus concepts and techniques are presented. In the historian's reasoning, the two boldfaced portions play which of the following roles?
- A. The first provides evidence in support of the overall position that the historian defends; the second is evidence that has been used to support an opposing position.
- B. The first provides evidence in support of the overall position that the historian defends; the second is that position.
- C. The first provides evidence in support of an intermediate conclusion that is drawn to provide support for the overall position that the historian defends; the second provides evidence against that intermediate conclusion.
- D. The first is evidence that has been used to support a conclusion that the historian criticizes; the second is evidence offered in support of the historian's own position.
- E. The first is evidence that has been used to support a conclusion that the historian criticizes; the second is further information that substantiates that evidence.

- 47. Although the earliest surviving Greek inscriptions written in an alphabet date from the eighth century B.C., a strong case can be made that the Greeks actually adopted alphabetic writing at least two centuries earlier. Significantly, the text of these earliest surviving Greek inscriptions sometimes runs from right to left and sometimes from left to right. Now, the Greeks learned alphabetic writing from the Phoenicians, and in the process they would surely have adopted whatever convention the Phoenicians were then using with respect to the direction of writing. Originally, Phoenician writing ran in either direction, but by the eighth century B.C. it had been consistently written from right to left for about two centuries. In the argument given, the two portions in boldface play which of the following roles?
- A. The first is the position that the argument seeks to establish; the second reports a discovery that has been used to support a position that the argument opposes.
- B. The first is the position that the argument seeks to establish; the second presents an assumption on which the argument relies.
- C. The first presents evidence that is used in support of the position that the argument seeks to establish; the second presents an assumption on which the argument relies.
- D. The first is an objection raised against a position that the argument opposes; the second is the position that the argument seeks to establish.
- E. The first is an objection raised against a position that the argument opposes; the second is evidence that has been used to support that position.
- 48. Although the earliest surviving Greek inscriptions written in an alphabet date from the eighth century B.C., a strong case can be made that the Greeks actually adopted alphabetic writing at least two centuries earlier. Significantly, the text of these earliest surviving Greek inscriptions sometimes runs from right to left and sometimes from left to right. Now, the Greeks learned alphabetic writing from the Phoenicians, and in the process they would surely have adopted whatever convention the Phoenicians were then using with respect to the direction of writing. Originally, Phoenicians writing ran in either direction, but by the eighth century B.C. it had been consistently written from right to left for about two centuries. In the argument given, the two portions in boldface play which of the following roles?
- A. The first provides evidence in support of the position that the argument seeks to establish; the second is that position.
- B. The first provides evidence in support of the position that the argument seeks to establish; the second presents an assumption on which that argument relies.
- C. The first is an assumption that the argument concludes is unjustified; the second presents part of the grounds for that conclusion.
- D. The first is evidence that forms the basis for an objection to the position that the argument seeks to establish; the second is that position.
- E. The first is evidence that forms the basis for an objection to the position that the argument seeks to establish; the second is a judgment that is introduced in order to call into question the relevance of that evidence.

- 49. Criminologist: Some legislators advocate mandating a sentence of life in prison for anyone who, having twice served sentences for serious crimes, is subsequently convicted of a third serious crime. These legislators argue that such a policy would reduce crime dramatically, since it would take people with a proven tendency to commit crimes off the streets permanently. What this reasoning overlooks, however, is that people old enough to have served two prison sentences for serious crimes rarely commit more than one subsequent crime. Filling our prisons with such individuals would have exactly the opposite of the desired effect, since it would limit our ability to incarcerate younger criminals, who commit a far greater proportion of serious crimes. In the argument as a whole, the two boldfaced portions play which of the following roles?
- A. The first is a conclusion that the argument as a whole seeks to refute; the second is a claim that has been advanced in support of that conclusion.
- B. The first is a conclusion that the argument as a whole seeks to refute; the second is the main conclusion of the argument.
- C. The first is the main conclusion of the argument; the second is an objection that has been raised against that conclusion.
- D. The first is the main conclusion of the argument; the second is a prediction made on the basis of that conclusion.
- E. The first is a generalization about the likely effect of a policy under consideration in the argument; the second points out a group of exceptional cases to which that generalization does not apply.
- 50. Editorial: An arrest made by a Midville police officer is provisional until the officer has taken the suspect to the police station and the watch commander has officially approved the arrest. Such approval is denied if the commander judges that the evidence on which the provisional arrest is based is insufficient. A government efficiency expert has found that almost all provisional arrests meet standards for adequacy of evidence that watch commanders enforce. The expert therefore recommends that the watch commander's approval should no longer be required since the officers' time spent obtaining approval is largely wasted. This recommendation should be rejected as dangerous, however, since there is no assurance that the watch commanders' standards will continue to be observed once approval is no longer required. In the editorial, the two portions in boldface play which of the following roles?
- A. The first is a recommendation made by the editorial; the second acknowledges a potential objection against that recommendation.
- B. The first is a proposal against which the editorial is directed; the second is a judgment reached by the editorial concerning that proposal.
- C. The first provides evidence in support of a recommendation that the editorial supports; the second is the conclusion reached by the editorial.
- D. The first is a position that the editorial challenges; the second is a judgment that was made in support of that challenged position.
- E. The first is a recommendation that the editorial questions; the second provides evidence against that recommendation.

- 51. Business Consultant: Some corporations shun the use of executive titles because they fear that the use of titles indicating position in the corporation tends to inhibit communication up and down the corporate hierarchy. Since an executive who uses a title is treated with more respect by outsiders, however, use of a title can facilitate an executive's dealings with external businesses. The obvious compromise is for these executives to use their corporate titles externally but not internally, since even if it is widely known that the corporation's executives use executive titles outside their organization, this knowledge does not by itself inhibit communication within the corporation. In the consultant's reasoning, the two portions in boldface play which of the following roles?
- A. The first presents an obstacle to achieving a certain goal; the second presents a reason for considering that goal to be undesirable.
- B. The first is a consideration that has led to the adoption of a certain strategy; the second presents a reason against adopting that strategy.
- C. The first describes a concern that the consultant dismisses as insignificant; the second is a consideration that serves as the basis for that dismissal.
- D. The first is a belief for which the consultant offers support; the second is part of that support.
- E. The first is a belief against which evidence is offered; the second is part of the evidence offered against that belief.
- 52. Scientists typically do their most creative work before the age of forty. It is commonly thought that this happens because aging by itself brings about a loss of creative capacity. However, a study has found that almost all scientists who produce highly creative work beyond the age of forty entered their fields late and less than a dozen years before their creative breakthroughs. Since creative breakthroughs by scientists under forty also generally occur within a dozen years of the scientist's entry into the field, the study's finding strongly suggests that the real reason why scientists over forty rarely produce highly creative work is not due to age but rather because most have spent too long in their fields. In the argument given, the two portions in boldface play which of the following roles?
- A. The first is the position that the argument as a whole defends; the second is evidence that is advanced as part of that defense.
- B. The first and second are both claims that have been advanced in support of a position that the argument as a whole opposes.
- C. The first is an explanation that the argument challenges; the second provides evidence in support of a competing explanation that the argument defends.
- D. The first is an explanation that the argument challenges; the second is evidence that has been used against an alternative explanation that the argument defends.
- E. The first is an explanation that the argument defends; the second is evidence that has been used to challenge that explanation.

- 53. Ecologist: The Scottish Highlands were once the site of extensive forests, but these forests have mostly disappeared and been replaced by peat bogs. The common view is that the Highlands' deforestation was caused by human activity, especially agriculture. However, agriculture began in the Highlands less than 2,000 years ago. Peat bogs, which consist of compressed decayed vegetable matter, build up by only about one foot per 1,000 years and, throughout the Highlands, remains of trees in peat bogs are almost all at depths great than four feet. Since climate changes that occurred between 7,000 and 4,000 years ago favored the development of peat bogs rather than the survival of forests, the deforestation was more likely the result of natural processes than of human activity. In the ecologist's argument the two portions in boldface play which of the following roles?
- A. The first is evidence that has been used in support of a position that the ecologist rejects; the second is a finding that the ecologist uses to counter that evidence.
- B. The first is evidence that, in light of the evidence provided in the second, serves as grounds for the ecologist's rejection of a certain position.
- C. The first is a position that the ecologist rejects; the second is evidence that has been used in support of that position.
- D. The first is a position that the ecologist rejects; the second provides evidence in support of that rejection.
- E. The first is a position for which the ecologist argues; the second provides evidence to support that position.
- 54. Several of a certain bank's top executives have recently been purchasing shares in their own bank. This activity has occasioned some surprise, since it is widely believed that the bank, carrying a large number of bad loans, is on the brink of collapse. Since the executives are well placed to know their bank's true condition, it might seem that their share purchases show that the danger of collapse is exaggerated. However, the available information about the bank's condition is from reliable and informed sources, and corporate executives do sometimes buy shares in their own company in a calculated attempt to calm worries about their company's condition. On balance, therefore, it is likely that the executives of the bank are following this example. In the argument given, the two boldfaced portions play which of the following roles?
- A. The first describes the circumstance the explanation of which is the issue that the argument addresses; the second states the main conclusion of the argument.
- B. The first describes the circumstance the explanation of which is the issue the argument addresses; the second states a conclusion that is drawn in order to support the main conclusion of the argument.
- C. The first provides evidence to defend the position that the argument seeks to establish against opposing positions; the second states the main conclusion of the argument.
- D. The first provides evidence to support the position that the argument seeks to establish; the second states a conclusion that is drawn in order to support the argument's main conclusion.
- E. Each provides evidence to support the position that the argument seeks to establish.

- 55. Aroca City currently funds its public schools through taxes on property. In place of this system, the city plans to introduce a sales tax of three percent on all retail sales in the city. Critics protest that **three percent of current retail sales falls short of the amount raised for schools by property taxes.** The critics are correct on this point. Nevertheless, implementing the plan will probably not reduce the money going to Aroca's schools. Several large retailers have selected Aroca City as the site for huge new stores, and these are certain to draw large numbers of shoppers from neighboring municipalities, where sales are taxed at rates of six percent and more. In consequence, **retail sales in Aroca City are bound to increase substantially.** In the argument given, the two potions in boldface play which of the following roles?
- A. The first is an objection that has been raised against a certain plan; the second is a prediction that, if accurate, undermines the force of that objection.
- B. The first is a criticism, endorsed by the argument, of a funding plan; the second is a point the argument makes in favor of adopting an alternative plan.
- C. The first is a criticism, endorsed by the argument, of a funding plan; the second is the main reason cited by the argument for its endorsement of the criticism.
- D. The first is a claim that the argument seeks to refute; the second is the main point used by the argument to show that the claim is false.
- E. The first is a claim that the argument accepts with certain reservations; the second presents that claim in a rewarding that is not subject to those reservations.
- 56. Delta products, Inc., has recently switched at least partly from older technologies using fossil fuels to new technologies powered by electricity. The question has been raised whether it can be concluded that for a given level of output, Delta's operation now causes less fossil fuel to be consumed than it did formerly. The answer, clearly, is yes, since the amount of fossil fuel used to generate the electricity needed to power the new technologies is less than the amount needed to power the older technologies, provided that the level of output is held constant. In the argument given, the two boldface portions play which of the following roles?
- A. The first identifies the content of the conclusion of the argument; the second provides support for that conclusion.
- B. The first provides support for the conclusion of the argument; the second identifies the content of that conclusion.
- C. The first states the position that the argument opposes; the second states the conclusion of the argument.
- D. Each provides evidence that calls the conclusion of the argument into question.
- E. Each provides support for the conclusion of the argument.

- 57. As a large corporation in a small country, Hachnut wants its managers to have international experience, so each year it sponsors management education abroad for its management trainees. Hachnut has found, however, that the attrition rate of graduates from this program is very high, with many of them leaving Hachnut to join competing firms soon after completing the program. Hachnut does use performance during the program as a criterion in deciding among candidates for management positions, but both this function and the goal of providing international experience could be achieved in other ways. Therefore, if the attrition problem cannot be successfully addressed, Hachnut should discontinue the sponsorship program. In the argument given, the two boldfaced portions play which of the following roles?
- A. The first describes a practice that the argument seeks to justify; the second states a judgment that is used in support of a justification for that practice.
- B. The first describes a practice that the argument seeks to explain; the second presents part of the argument's explanation of that practice.
- C. The first introduces a practice that the argument seeks to evaluate; the second provides grounds for holding that the practice cannot achieve its objective.
- D. The first introduces a policy that the argument seeks to evaluate; the second provides grounds for holding that the policy is not needed.
- E. The first introduces a consideration supporting a policy that the argument seeks to evaluate; the second provides evidence for concluding that the policy should be abandoned.
- 58. Since it has become known that several of a bank's top executives have been buying shares in their own bank, the bank's depositors, who had been worried by rumors that the bank faced impending financial collapse, have been greatly relieved. They reason that since top executives evidently have faith in the bank's financial soundness, those worrisome rumors must be false. They might well be overoptimistic, however since corporate executives have sometimes bought shares in their own company in a calculated attempt to dispel negative rumors about the company's health. In the argument given, the two boldfaced portions play which of the following roles?
- A. The first summarizes the evidence used in the reasoning called into question by the argument; the second states the counterevidence on which the argument relies.
- B. The first summarizes the evidence used in the reasoning called into question by the argument; the second is an intermediate conclusion supported by the evidence.
- C. The first is an intermediate conclusion that forms part of the reasoning called into question by the argument; the second is evidence that undermines the support for this intermediate conclusion.
- D. The first is an intermediate conclusion that forms part of the reasoning called into question by the argument; the second is the main conclusion of the argument.
- E. The first is an intermediate conclusion that forms part of the reasoning called into question by the argument; the second states a further conclusion supported by this intermediate conclusion.

- 59. One of the limiting factors in human physical performance is the amount of oxygen that is absorbed by the muscles from the bloodstream. Accordingly, entrepreneurs have begun selling at gymnasiums and health clubs bottles of drinking water, labeled "SuperOXY," that has extra oxygen dissolved in the water. Such water would be useless in improving physical performance, however, since the only way to get oxygen into the bloodstream so that it can be absorbed by the muscles is through the lungs. Which of the following, if true, would serve the same function in the argument as the statement in boldface?
 - A. the water lost in exercising can be replaced with ordinary tap water
 - B. the amount of oxygen in the blood of people who are exercising is already more than the muscle can absorb
 - C. world-class athletes turn in record performance without such water
 - D. frequent physical exercise increases the body's ability to take in and use oxygen
 - E. lack of oxygen is not the only factor limiting human physical performance
- 60. Business Consultant: Some corporations shun the use of executive titles because they fear that the use of titles indicating position in the corporation tends to inhibit communication up and down the corporate hierarchy. Since an executive who uses a title is treated with more respect by outsiders, however, use of a title can facilitate an executive's dealings with external businesses. Clearly, corporations should adopt the compromise of encouraging their executives to use their corporate titles externally but not internally, since even if it is widely known that the corporation's executives use titles outside their organization, this knowledge does not by itself inhibit communication within the corporation. In the consultant's reasoning, the two portions in boldface play which of the following roles?
- A. The first describes a strategy that has been adopted to avoid a certain problem; the second presents a drawback to that strategy.
- B. The first describes a strategy that has been adopted to avoid a certain problem; the second is a consideration raised to call into question the effectiveness of that strategy as a means of achieving that goal.
- C. The first describes a strategy that has been adopted to avoid a certain problem; the second is a consideration the consultant raises in questioning the significance of that problem.
- D. The first is part of an explanation that the consultant offers for a certain phenomenon; the second is that phenomenon.
- E. The first describes a policy for which the consultant seeks to provide a justification; the second is a consideration the consultant raises as part of that justification.

- 61. During the past year, Pro-Tect Insurance Company's total payouts on car-theft claims were larger than the company can afford to sustain. Pro-Tect cannot reduce the number of car-theft policies it carries, so cannot protect itself against continued large payouts that way. Therefore, Pro-Tect has decided to offer a discount to holders of car-theft policies whose cars have antitheft devices. Many policyholders will respond to the discount by installing antitheft devices, since the amount of the discount will within two years typically more than cover the cost of installation. Thus, because cars with antitheft devices are rarely stolen, Pro-Tect's plan is likely to reduce its annual payouts. In the argument above, the two portions in boldface play which of the following roles?
- A. The first rules out a certain strategy for achieving a goal; the second presents the strategy that was adopted instead and whose effectiveness the argument assesses.
- B. The first is a judgment made in support of a certain conclusion; the second is that conclusion.
- C. The first has been used as a consideration to support adopting a certain strategy for achieving a goal; the second reports a decision to adopt an alternative strategy.
- D. The first provides evidence in favor of adopting a certain strategy for achieving a goal; the second reports a decision to pursue an alternative goal.
- E. The first is a consideration offered against adopting a certain strategy for achieving a goal; the second is the main conclusion that the argument is seeking to establish.
- 62. Many winemakers use cork stoppers; but cork stoppers can leak, crumble, or become moldy, so that those winemakers must often discard a significant proportion of their inventory of bottled wine. Bottlemaster plastic stoppers, which cannot leak, crumble, or mold, have long been available to winemakers, at a price slightly higher than that of traditional cork stoppers. Cork prices, however, are expected to rise dramatically in the near future. Clearly, therefore, winemakers who still use cork but wish to keep production costs from rising will be forced to reconsider plastic stoppers. And since the wine-buying public's association of plastic stoppers with poor-quality wine is weakening, there is an excellent chance that the Bottlemaster plastic stopper will gain an increased share of the marked for wine-bottle stoppers. In the argument given, the two portions in boldface play which of the following roles?
- A. The first is a judgment that has been advanced in support of a position that the argument opposes; the second is the main conclusion of the argument.
- B. The first is a judgment that has been advanced in support of a position that the argument opposes; the second is a conclusion drawn in order to support the main conclusion of the argument.
- C. The first is the main conclusion of the argument; the second provides evidence in support of that main conclusion.
- D. The first is the main conclusion of the argument; the second is a restatement of that main conclusion.
- E. The first is a conclusion drawn in order to support the main conclusion of the argument; the second is that main conclusion.

- 63. Museums that house Renaissance oil paintings typically store them in environments that are carefully kept within narrow margins of temperature and humidity to inhibit any deterioration. Laboratory tests have shown that the kind of oil paint used in these paintings actually adjusts to climatic changes quite well. If, as some museum directors believe, paint is the most sensitive substance in these works, then by relaxing the standards for temperature and humidity control, museums can reduce energy costs without risking damage to these paintings. Museums would be rash to relax those standards, however, since results of preliminary tests indicate that gesso, a compound routinely used by Renaissance artists to help paint adhere to the canvas, is unable to withstand significant variations in humidity. In the argument above, the two portions in boldface play which of the following roles?
- A. The first is an objection that has been raised against the position taken by the argument; the second is the position taken by the argument.
- B. The first is the position taken by the argument; the second is the position that the argument calls into question.
- C. The first is a judgment that has been offered in support of the position that the argument calls into question; the second is a circumstance on which that judgment is, in part based.
- D. The first is a judgment that has been offered in support of the position that the argument calls into question; the second is that position.
- E. The first is a claim that the argument calls into question; the second is the position taken by the argument.
- 64. Last year a record number of new manufacturing jobs were created. Will this year bring another record? Well, any new manufacturing job is created either within an existing company or by the start-up of a new company. Within existing firms, new jobs have been created this year at well below last year's record pace. At the same time, there is considerable evidence that the number of new companies starting up this year will be no higher than it was last year and there is no reason to think that the new companies starting up this year will create more jobs per company than did last year's start-ups. So clearly, the number of new jobs created this year will fall short of last year's record. In the argument given, the two portions in boldface play which of the following roles?
- A. The first provides evidence in support of the main conclusion of the argument; the second is a claim that argument challenges.
- B. The first is a generalization that the argument seeks to establish; the second is a conclusion that the argument draws in order to support that generalization.
- C. The first is a generalization that the argument seeks to establish; the second is a judgment that has been advanced in order to challenge that generalization.
- D. The first is presented as obvious truth on which the argument is based; the second is a claim that has been advanced in support of a position that the argument opposes.
- E. The first is presented as obvious truth on which the argument is based; the second is a judgment advanced in support of the main conclusion of the argument.

- 65. Critics of certain pollution-control regulations have claimed that the **money spent over the last decade in order to reduce emissions of carbon monoxide and of volatile organic compounds has been wasted.** The evidence they offer in support of this claim might appear compelling: despite the money spent, annual emissions of these pollutants have been increasing steadily. This evidence is far from adequate, however, since **over the last decade a substantial number of new industrial facilities that emit these pollutants have been built.** In the reasoning given, the two portions in boldface play which of the following roles?
- A. The first identifies a claim that the reasoning seeks to show is false; the second is evidence that has been cited by others in support of that claim.
- B. The first identifies a claim that the reasoning seeks to show is false; the second is a position for which the reasoning seeks to provide support.
- C. The first is a position that the reasoning contends is inadequately supported by the evidence; the second is a position for which the reasoning seeks to provide support.
- D. The first is a position that the reasoning contends is inadequately supported by the evidence; the second is evidence used to support the reasoning's contention.
- E. The first is a position that the reasoning contends is inadequately supported by the evidence; the second is evidence that has been used to support that position.
- 66. In countries where automobile insurance includes compensation for whiplash injuries sustained in automobile accidents, reports of having suffered such injuries are twice as frequent as they are in countries where whiplash is not covered. Some commentators have argued, correctly, that since there is presently no objective test for whiplash, spurious reports of whiplash injuries cannot be readily identified. These commentators are, however, wrong to draw the further conclusion that in the countries with the higher rates of reported whiplash injuries, half of the reported cases are spurious: clearly, in countries where automobile insurance does not include compensation for whiplash, people often have little incentive to report whiplash injuries that they actually have suffered. In the argument given, the two boldfaced portions play which of the following roles?
- A. The first is a finding whose accuracy is evaluated in the argument; the second is an intermediate conclusion drawn to support the judgment reached by the argument on the accuracy of that finding.
- B. The first is a finding whose accuracy is evaluated in the argument; the second is evidence that has been used to challenge the accuracy of that finding.
- C. The first is a finding whose implications are at issue in the argument; the second is an intermediate conclusion that has been used to support a conclusion that the argument criticizes.
- D. The first is a claim that the argument disputes; the second is a narrower claim that the argument accepts.
- E. The first is a claim that has been used to support a conclusion that the argument accepts; the second is that conclusion.

- 67.In countries where automobile insurance includes compensation for whiplash injuries sustained in automobile accidents, reports of having suffered such injuries are twice as frequent as they are in countries where whiplash is not covered. Presently, no objective test for whiplash exists, so it is true that spurious reports of whiplash injuries cannot be readily identified. Nevertheless, these facts do not warrant a conclusion that has been drawn by some commentators: that in the countries with the higher rates of reported whiplash injuries, half of the reported cases are spurious. Clearly, in countries where automobile insurance does not include compensation for whiplash, people often have little incentive to report whiplash injuries that they actually have suffered. In the argument given, the two boldfaced portions play which of the following roles?
- A. The first is a claim that the argument disputes; the second is a conclusion that has been based on that claim.
- B. The first is claim that has been used to support a position that the argument accepts; the second is a position that the argument rejects.
- C. The first is a finding whose accuracy is evaluated in the argument; the second is the judgment reached by the argument concerning the accuracy of the finding.
- D. The first is a finding whose implications are at issue in the argument; the second is the judgment reached by the argument concerning one alleged implication.
- E. The first is a finding, the explanation of which is at issue in the argument; the second is an objection that has been raised against the explanation that the argument defends.
- **68. Editorial:** An arrest made by a Midville police officer is provisional until the officer has taken the suspect to the police station and the watch commander has officially approved the arrest. Such approval is denied if the commander judges that the evidence on which the provisional arrest is based is insufficient. A government efficiency expert has observed that **almost all provisional arrests meet the standards for adequacy of evidence that the watch commanders enforce.** The expert has therefore recommended that **because the officers' time spent obtaining approval is largely wasted**, the watch commander's approval no longer be required. This recommendation should be rejected as dangerous, however, since there is no assurance that the watch commanders' standards will continue to be observed once approval is no longer required. **In the editorial, the two portions in boldface play which of the following roles?**
- A. The first is a claim, the accuracy of which is disputed by the editorial; the second is a conclusion drawn in order to support the main conclusion of the editorial.
- B. The first is an observation that the editorial disputes; the second is a conclusion that was drawn from that observation.
- C. The first is a finding that was used in support of a proposal that the editorial opposes; the second is a judgment that was based on that finding and in turn was used to support the proposal.
- D. The first is a finding introduced to support the main conclusion of the editorial; the second is that main conclusion.
- E. The first is a conclusion, the evidence for which the editorial evaluates; the second is part of the evidence cited in favor of that conclusion.

- 69. Paleontologist: About 2.8 million years ago, many species that lived near the ocean floor suffered substantial population declines. These declines coincided with the onset of an ice age. The notion that cold killed those bottom-dwelling creatures outright is misguided, however; temperatures near the ocean floor would have changed very little. Nevertheless, the cold probably did cause the population declines, though indirectly. Many bottom-dwellers depended for food on plankton, small organisms that lived close to the surface and sank to the bottom when they died. Most probably, the plankton suffered a severe population decline as a result of sharply lower temperatures at the surface, depriving many bottom-dwellers of food. In the paleontologist's reasoning, the two portions in boldface play which of the following roles?
- A. The first introduces the hypothesis proposed by the paleontologist; the second is a judgment offered in spelling out that hypothesis.
- B. The first introduces the hypothesis proposed by the paleontologist; the second is a position that the paleontologist opposes.
- C. The first is an explanation challenged by the paleontologist; the second is an explanation proposed by the paleontologist
- D. The first is a judgment advanced in support of a conclusion reached by the paleontologist; the second is that conclusion
- E. The first is a generalization put forward by the paleontologist; the second presents certain exceptional cases in which that generalization does not hold good
- 70. Plant scientists have used genetic engineering on seeds to produce crop plants that are highly resistant to insect damage. Unfortunately, the seeds themselves are quite expensive, and the plants require more fertilizer and water to grow well than normal ones. Thus, for most farmers the savings on pesticides would not compensate for the higher seed costs and the cost of additional fertilizer. However, since consumer demand for grains, fruits, and vegetables grown without the use of pesticides continues to rise, the use of genetically engineered seeds of this kind is likely to become widespread. In the argument given, the two portions in boldface play which of the following roles?
- A. The first supplies a context for the argument; the second is the argument's main conclusion.
- B. The first introduces a development that the argument predicts will have a certain outcome; the second is a state of affairs that the argument denies will be part of that outcome.
- C. The first presents a development that the argument predicts will have a certain outcome; the second acknowledges a consideration that weighs against that prediction.
- D. The first provides evidence to support a prediction that the argument seeks to defend; the second is that prediction.
- E. The first and the second each provide evidence to support the argument's main conclusion.

Evaluate Latest Questions

- 71. It is illegal to advertise prescription medications in Hedland except in professional medical journals or by mail directly to physicians. A proposed law would allow general advertising of prescription medications. Opponents object that, in general, laypersons lack the specialized knowledge to evaluate such advertisements and might ask their physicians for inappropriate medications. But since physicians have the final say as to whether to prescribe a medication for a patient, the objection provides no grounds for concern. Which of the following would it be most useful to establish in order to evaluate the argument?
- A. Whether nonprescription medications can interact with and block the action of any prescription medications that could be advertised to the general public
- B. Whether most prescription medication advertisements directed at the general public would be advertisements for recently developed medications newly available by prescription
- C. Whether prescription medication advertisements directed at the general public would appear on television and radio as well as in print
- D. Whether physicians are more likely to pay attention to advertising directed to the general public than to advertising directed to physicians
- E. Whether physicians are likely to succumb to pressure from patients to prescribe inappropriate medications
- 72. Community activist: If Morganville wants to keep its central shopping district healthy, it should prevent the opening of a huge SaveAll discount department store on the outskirts of Morganville. Records from other small towns show that whenever SaveAll has opened a store outside the central shopping district of a small town, within five years the town has experienced the bankruptcies of more than a quarter of the stores in the shopping district. The answer to which of the following would be most useful for evaluating the community activist's reasoning?
- A. Have community activists in other towns successfully campaigned against the opening of a SaveAll store on the outskirts of their towns?
- B. Do a large percentage of the residents of Morganville currently do almost all of their shopping at stores in Morganville?
- C. In towns with healthy central shopping districts, what proportion of the stores in those districts suffer bankruptcy during a typical five-year period?
- D. What proportion of the employees at the SaveAll store on the outskirts of Morganville will be drawn from Morganville?
- E. Do newly opened SaveAll stores ever lose money during their first five years of operation?
- 73. Journalist: Well-known businessman Arnold Bergeron has long been popular in the state, and he has often talked about running for governor, but he has never run. However, we have just learned that Bergeron has fulfilled the financial disclosure requirement for candidacy by submitting a detailed list of his current financial holdings to the election commission. So, it is very likely that Bergeron will be a candidate for governor this year. The answer to which of the following questions would be most useful in evaluating the journalist's argument?
- A. Has anybody else who has fulfilled the financial disclosure requirement for the upcoming election reported greater financial holdings than Bergeron?
- B. Is submitting a list of holdings the only way to fulfill the election commission's financial disclosure requirements?
- C. Did the information recently obtained by the journalists come directly from the election commission?
- D. Have Bergeron's financial holdings increased in value in recent years?
- E. Had Bergeron also fulfilled the financial disclosure requirements for candidacy before any previous gubernatorial elections?

- 74. Magazine Publisher: Our magazine does not have a liberal bias. It is true that when a book review we had commissioned last year turned out to express distinctly conservative views, we did not publish it until we had also obtained a second review that took a strongly liberal position. Clearly, however, our actions demonstrate not a bias in favor of liberal views but rather a commitment to a balanced presentation of diverse opinions. Determining which of the following would be most useful in evaluating the cogency of the magazine publisher's response?
- A. Whether any other magazines in which the book was reviewed carried more than one review of the book
- B. Whether the magazine publishes unsolicited book reviews as well as those that it has commissioned
- C. Whether in the event that a first review commissioned by the magazine takes a clearly liberal position the magazine would make any efforts to obtain further reviews
- D. Whether the book that was the subject of the two reviews was itself written from a clearly conservative or a clearly liberal point of view
- E. Whether most of the readers of the magazine regularly read the book reviews that the magazine publishes
- 75. A certain automaker aims to increase its market share by deeply discounting its vehicles' prices for the next several months. The discounts will cut into profits, but because they will be heavily advertised the manufacturer hopes that they will attract buyers away from rival manufacturers' cars. In the longer term, the automaker envisions that customers initially attracted by the discounts may become loyal customers. In assessing the plan's chances of achieving its aim, it would be most useful to know which of the following?
- A. Whether the automaker's competitors are likely to respond by offering deep discounts on their own products
- B. Whether the advertisements will be created by the manufacturer's current advertising agency
- C. Whether some of the automaker's models will be more deeply discounted than others
- D. Whether the automaker will be able to cut costs sufficiently to maintain profit margins even when the discounts are in effect
- E. Whether an alternative strategy might enable the automaker to enhance its profitability while holding a constant or diminishing share of the market
- **76.** The growing popularity of computer-based activities was widely expected to result in a decline in television viewing, since it had been assumed that people lack sufficient free time to maintain current television-viewing levels while spending increasing amounts of free time on the computer. That assumption, however, is evidently false: in a recent mail survey concerning media use, a very large majority of respondents who report increasing time spent per week using computers report no change in time spent watching television. **Which of the following would it be most useful to determine in order to evaluate the argument?**
- A. Whether a large majority of the survey respondents reported watching television regularly
- B. Whether the amount of time spent watching television is declining among people who report that they rarely or never use computers
- C. Whether the type of television programs a person watches tends to change as the amount of time spent per week using computers increases
- D. Whether a large majority of the computer owners in the survey reported spending increasing amounts of time per week using computers
- E. Whether the survey respondents' reports of time spent using computers included time spent using computers at work

- 77. Business Analyst: National Motors began selling the Luxora—its new model of sedan—in June. Last week, National released sales figures for the summer months of June, July, and August that showed that by the end of August only 80,000 Luxoras had been sold. Therefore, National will probably not meet its target of selling 500,000 Luxoras in the model's first twelve months. Which of the following would be most useful to establish in order to evaluate the analyst's prediction?
- A. Whether new-car sales are typically lower in the summer months than at any other time of the vear
- B. Whether National Motors currently produces more cars than any other automaker
- C. Whether the Luxora is significantly more expensive than other models produced by National Motors
- D. Whether National Motors has introduced a new model in June in any previous year
- E. Whether National Motors will suffer serious financial losses if it fails to meet its sales goal for the Luxora
- **78.** The emission of sulfur dioxide when high-sulfur coal is burned is restricted by law. New coal-burning plants usually comply with the law by installing expensive equipment to filter sulfur dioxide from their emissions. These new plants could save money by installing instead less expensive cleaning equipment that chemically removes most sulfur from coal before combustion. Which of the following, if known, would be most relevant to evaluating the claim above about how new coal-burning plants could save money?
- A. Whether existing oil-burning plants are required to filter sulfur dioxide from their emissions
- B. Whether the expense of installing the cleaning equipment in a new plant is less than the expense of installing the cleaning equipment in an older plant
- C. Whether the process of cleaning the coal is more expensive than the process of filtering the emissions
- D. Whether lawful emissions of sulfur dioxide from coal-burning plants are damaging the environment
- E. Whether existing plants that use the filtering equipment could replace this equipment with the cleaning equipment and still compete with new plants that install the cleaning equipment
- **79.** Certain genetically modified strains of maize produce a powerful natural insecticide. The insecticide occurs throughout the plant, including its pollen. Maize pollen is dispersed by the wind and frequently blows onto milkweed plants that grow near maize fields. Caterpillars of monarch butterflies feed exclusively on milkweed leaves. When these caterpillars are fed milkweed leaves dusted with pollen from modified maize plants, they die. Therefore, by using genetically modified maize, farmers put monarch butterflies at risk. **Which of the following would it be most useful to determine in order to evaluate the argument?**
- A. Whether the natural insecticide is as effective against maize-eating insects as commercial insecticides typically used on maize are
- B. Whether the pollen of genetically modified maize contains as much insecticide as other parts of these plants
- C. Whether monarch butterfly caterpillars are actively feeding during the part of the growing season when maize is releasing pollen
- D. Whether insects that feed on genetically modified maize plants are likely to be killed by insecticide from the plant's pollen
- E. Whether any maize-eating insects compete with monarch caterpillars for the leaves of milkweed plants growing near maize fields

- **80.** TrueSave is a mail-order company that ships electronic products from its warehouses to customers worldwide. The company's shipping manager is proposing that customer orders be packed with newer, more expensive packing materials that virtually eliminate damage during shipping. The manager argues that overall costs would essentially remain unaffected, since the extra cost of the new packing materials roughly equals the current cost of replacing products returned by customers because they arrived in damaged condition. **Which of the following would it be most important to ascertain in determining whether implementing the shipping manager's proposal would have the argued-for effect on costs?**
- A. Whether the products shipped by TrueSave are more vulnerable to incurring damage during shipping than are typical electronic products
- B. Whether electronic products are damaged more frequently in transit than are most other products shipped by mail-order companies
- C. Whether a sizable proportion of returned items are returned because of damage already present when those items were packed for shipping
- D. Whether there are cases in which customers blame themselves for product damage that, though present on arrival of the product, is not discovered until later
- E. Whether TrueSave continually monitors the performance of the shipping companies it uses to ship products to its customers
- **81.** It is illegal to advertise prescription medications in Hedland except directly to physicians, either by mail or in medical journals. A proposed law would allow general advertising of prescription medications. Opponents object that the general population lacks the specialized knowledge to evaluate these advertising claims and might ask their physicians for inappropriate medications. But since physicians have the final say as to whether to prescribe a medication for a patient, the objection provides no grounds for concern. **Which of the following would it be most useful to establish in order to evaluate the argument?**
- A. Whether nonprescription medications can interact with any of the prescription medications that could be advertised to the general public and block the action of those prescription medications
- B. Whether some people might go to a physician for no reason other than to ask for a particular medication they have seen advertised
- C. Whether the proposed law requires prescription-medication advertisements directed to the general public to provide the same information as do advertisements directed to physicians
- D. Whether physicians are more likely to pay attention to advertising directed to the general public than to advertising directed to physicians
- E. Whether physicians are likely to succumb to pressure from patients to prescribe inappropriate medications

- 82. Regulations will not allow a pesticide that is toxic to humans to be used inside houses unless the pesticide will dissipate completely from the air within eight hours after its application. One test that pesticide manufacturers standardly use to determine how quickly anti-termite pesticides dissipate involves spraying the pesticides on the walls of room-sized plywood boxes and then timing its dissipation. Which of the following would it be most useful to know in order to evaluate whether a dissipation time of just under eight hours on the manufacturers' test indicates that an anti-termite pesticide that is toxic to humans obeys regulations for use in houses?
- A. Whether anti-termite pesticides dissipate more slowly in furnished rooms than in plywood boxes
- B. Whether people who apply anti-termite pesticide standardly wear protective equipment that prevents them from being exposed to the pesticide
- C. Whether people whose house is being treated with anti-termite pesticide generally know that they should remain out of their house during the hours immediately after the pesticide's application
- D. Whether there are anti-termite pesticides that are toxic to humans that, when subjected to the manufacturers' test, dissipate completely from the air in the boxes in well under eight hours
- E. Whether anti-termite pesticides that are not toxic to humans tend to take longer to dissipate than those that are toxic
- **83.** Plant scientists have been able to genetically engineer vegetable seeds to produce crops that are highly resistant to insect damage. Although these seeds currently cost more than conventional seeds, their cost is likely to decline. Moreover, farmers planting them can use far less pesticide, and most consumers prefer vegetables grown with less pesticide, therefore, for crops for which these seeds can be developed, their use is likely to become the norm. **Which of the following would be most useful to know in evaluating the argument above?**
- A. Whether plant scientists have developed insect-resistant seeds for every crop that is currently grown commercially
- B. Whether farmers typically use agricultural pesticides in larger amounts than is necessary to prevent crop damage.
- C. Whether plants grown from the new genetically engineered seeds can be kept completely free of insect damage.
- D. Whether seeds genetically engineered to produce insect-resistant crops generate significantly lower per acre crop yields than do currently used seeds.
- E. Whether most varieties of crops currently grown commercially have greater natural resistance to insect damage than did similar varieties in the past.
- **84.** Fish currently costs about the same at seafood stores throughout Eastville and its surrounding suburbs. Seafood stores buy fish from the same wholesalers and at the same prices, and other business expenses have also been about the same. But new tax breaks will substantially lower the cost of doing business within the city. Therefore, in the future, profit margins will be higher at seafood stores within the city than at suburban seafood stores. **For the purposes of evaluating the argument, it would be most useful to know whether**
- A. more fish wholesalers are located within the city than in the surrounding suburbs.
- B. any people who currently own seafood stores in the suburbs surrounding Eastville will relocate their businesses nearer to the city
- C. the wholesale price of fish is likely to fall in the future
- D. fish has always cost about the same at seafood stores throughout Eastville and its surrounding suburbs.
- E. seafood stores within the city will in the future set prices that are lower than those at suburban seafood stores.

- **85. Goronian lawmaker:** Goronia's Cheese Importation Board, the agency responsible for inspecting all wholesale shipments of cheese entering Goronia from abroad and rejecting shipments that fail to meet specified standards, rejects about one percent of the cheese that it inspects. Since the health consequences and associated costs of not rejecting that one percent would be negligible, whereas the cost of maintaining the agency is not, the agency's cost clearly outweighs the benefits it provides. **Knowing the answer to which of the following would be most useful in evaluating the lawmaker's argument?**
- A. Are any of the types of cheeses that are imported into Goronia also produced in Goronia?
- B. Has the Cheese Importation Board, over the last several years, reduced its operating costs by eliminating inefficiencies within the agency itself?
- C. Does the possibility of having merchandise rejected by the Cheese Importation Board deter many cheese exporters from shipping substandard cheese to Goronia?
- D. Are there any exporters of cheese to Goronia whose merchandise is never rejected by the Cheese Importation Board?
- E. How is the cheese rejected by the Cheese Importation Board disposed of?
- **86.** The population of desert tortoises in Targland's Red Desert has declined, partly because they are captured for sale as pets and partly because people riding all-terrain vehicles have damaged their habitat. Targland plans to halt this population decline by blocking the current access routes into the desert and announcing new regulations to allow access only on foot. Targland's officials predict that these measures will be adequate, since it is difficult to collect the tortoises without a vehicle. **Which of the following would it be most important to establish in order to evaluate the officials' prediction?**
- A. Whether possessing the tortoises as pets remains legally permissible in Targland
- B. Whether Targland is able to enforce the regulations with respect to all-terrain vehicle entry at points other than the current access routes
- C. Whether the Red Desert tortoises are most active during the day or at night
- D. Whether people who travel on foot in the Red Desert often encounter the tortoises
- E. Whether the Targland authorities held public hearings before restricting entry by vehicle into the Red Desert
- 87. Though sucking zinc lozenges has been promoted as a treatment for the common cold, research has revealed no consistent effect. Recently, however, a zinc gel applied nasally has been shown to greatly reduce the duration of colds. Since the gel contains zinc in the same form and concentration as the lozenges, the greater effectiveness of the gel must be due to the fact that cold viruses tend to concentrate in the nose, not the mouth. In order to evaluate the argument, it would be most helpful to determine which of the following?
- A. Whether zinc is effective only against colds, or also has an effect on other virally caused diseases
- B. Whether there are remedies that do not contain zinc but that, when taken orally, can reduce the duration of colds
- C. Whether people who frequently catch colds have a zinc deficiency
- D. Whether either the zinc gel or the lozenges contain ingredients that have an impact on the activity of the zinc
- E. Whether the zinc gel has an effect on the severity of cold symptoms, as well as on their duration

- **88.** Trancorp currently transports all its goods to Burland Island by truck. The only bridge over the channel separating Burland from the mainland is congested, and trucks typically spend hours in traffic. Trains can reach the channel more quickly than trucks, and freight cars can be transported to Burland by barges that typically cross the channel in an hour. Therefore, to reduce shipping time, Trancorp plans to switch to trains and barges to transport goods to Burland. **Which of the following would be most important to know in determining whether Trancorp's plan, if implemented, is likely to achieve its goal?**
- A. Whether transportation by train and barge would be substantially less expensive than transportation by truck.
- B. Whether there are boats that can make the trip between the mainland and Burland faster than barges can
- C. Whether loading the freight cars onto barges is very time consuming
- D. Whether the average number of vehicles traveling over the bridge into Burland has been relatively constant in recent years
- E. Whether most trucks transporting goods into Burland return to the mainland empty
- 89. Urban air contains more sulfur dioxide than does rural air, and plants in cities typically grow more slowly than do plants in rural areas. In an experiment to see how much of the difference in growth is due to sulfur dioxide, classes in an urban and a rural school grew plants in greenhouses at their schools and filtered the greenhouse air to eliminate sulfur dioxide. Plants in the urban greenhouse grew more slowly than those in the rural greenhouse. Which of the following, if true, would it be most important to take into account in evaluating the result?
- A. The urban school was located in a part of the city in which levels of sulfur dioxide in the air were usually far lower than is typical for urban areas.
- B. At both schools, the plants in the greenhouses grew much more quickly than did plants planted outdoors in plots near the greenhouses.
- C. The urban class conducting the experiment was larger than the rural class conducting the experiment.
- D. Heavy vehicular traffic such as is found in cities constantly deposits grime on greenhouse windows, reducing the amount of light that reaches the plants inside.
- E. Because of the higher levels of sulfur dioxide in the air at the urban school, the air filters for the urban school's greenhouse were changed more frequently than were those at the rural school.
- **90.** Following several years of declining advertising sales, the Greenville Times reorganized its advertising sales force two years ago. Before the reorganization, the sales force was organized geographically, with some sales representatives concentrating on city-center businesses and others concentrating on different outlying regions. The reorganization attempted to increase the sales representatives' knowledge of clients' businesses by having each sales representative deal with only one type of industry or of retailing. After the reorganization, advertising sales increased. **In assessing whether the improvement in advertising sales can properly be attributed to the reorganization, it would be helpful to find out each of the following EXCEPT:**
- A. Two years ago, what proportion of the Greenville Times' total revenue was generated by advertising sales?
- B. Has the circulation of the Greenville Times increased substantially in the last two years?
- C. Has there been a substantial turnover in personnel in the advertising sales force over the last two years?
- D. Before the reorganization, had sales representatives found it difficult to keep up with relevant developments in all types of businesses to which they are assigned?
- E. Has the economy in Greenville and the surrounding regions been growing rapidly over the last two years?

- **91.** In a certain wildlife park, park rangers are able to track the movements of many rhinoceroses because those animals wear radio collars. When, as often happens, a collar slips off, it is put back on. Putting a collar on a rhinoceros involves immobilizing the animal by shooting it with a tranquilizer dart. Female rhinoceroses that have been frequently re-collared have significant lower fertility rate than un-collared females. Probably, therefore, some substances in the tranquilizer inhibit fertility. **In evaluating the argument, it would be most useful to determine which of the following?**
- A. Whether there are more collared female rhinoceroses than un-collared female rhinoceroses in the park.
- B. How the tranquilizer that is used for immobilizing rhinoceroses differs, if at all, from tranquilizers used in working with other large mammals.
- C. How often park rangers need to use tranquilizer dart to immobilize rhinoceroses for reasons other than attaching radio collars.
- D. Whether male rhinoceroses in the wild park lose their collar any more often than the park's female rhinoceroses do
- E. Whether radio collar is the only practical means that park rangers have for tracking the movements of rhinoceroses in the park.
- **92.** Capuchin monkeys in Venezuela often rub a certain type of millipede into their fur. Secretions of these millipedes have been shown to contain two chemicals that are potent mosquito repellents, and mosquitoes carry parasites that debilitate the capuchins. The rubbing behavior is rare except during the rainy season, when mosquito populations are at their peak. Therefore monkeys probably rub millipedes into their fur only because doing so helps protect them against mosquitoes. **Which of the following would be most useful to determine in order to evaluate the argument?**
- A. Whether the two chemicals provide any protection for millipedes against their own repellents.
- B. Whether the type of millipede used by the capuchin monkeys in Venezuela is found in other parts of the world.
- C. Whether animals other than capuchins rub insects of any kind into their fur
- D. Whether the only time millipedes are readily available to capuchins is during rainy season
- E. Whether secretions of any other insects accessible to capuchins contain chemicals that repel the mosquitoes
- **93.** Columnist: People should avoid using a certain artificial fat that has been touted as a resource for those whose medical advisers have advised them to reduce their fat intake. Although the artificial fat, which can be used in place of fat in food preparation, has none of the negative health effects of fat, it does have a serious drawback: it absorbs certain essential vitamins, thereby preventing them from being used by the body. **In evaluating the columnist's position, it would be most useful to determine which of the following?**
- A. Whether increasing one's intake of the vitamins can compensate for the effects of the artificial fat
- B. Whether the vitamins that the artificial fat absorbs are present in foods that contain the fat
- C. Whether having an extremely low fat intake for an extended period can endanger the health
- D. Whether there are any foods that cannot be prepared using the artificial fat as a substitute for other fats
- E. Whether people are generally able to detect differences in taste between foods prepared using the artificial fat and foods that are similar except for the use of other fats

94. Fedora Convertibles began selling the Freewheeler – its newest convertible sports car – in May of this year. Fedora sent out a press release last month indicating that the Freewheeler's sales for May, June, July, and August totaled over 50,000. As a result, Fedora will in all likelihood easily meet its stated sales goal of 120,000 for Freewheeler's first year of release.

Which of the following would be most useful in order to evaluate this prediction?

- A. Fedora is the market leader in this category of automobile.
- B. Freewheeler is significantly more expensive than similar models produced by Fedora's competitors.
- C. Fedora released a similar model in May of the previous year.
- D. Sales of similar models of cars are typically much higher in the summer months than at any other time of the year.
- E. Freewheeler sales are important to meeting the sales goals of Fedora as a company.

Miscellaneous – Latest Questions

95. **Environmentalist**: The use of snowmobiles in the vast park north of Milville creates unacceptable levels of air pollution and should be banned.

Milville business spokesperson: Snowmobiling brings many out-of-towners to Milville in winter months, to the great financial benefit of many local residents. So, economics dictate that we put up with the pollution.

Environmentalist: I disagree: A great many cross-country skiers are now kept from visiting Milville by the noise and pollution that snowmobiles generate.

Environmentalist responds to the business spokesperson by doing which of the following?

- A. Challenging an assumption that certain desirable outcome can derive from only one set of circumstances
- B. Challenging an assumption that certain desirable outcome is outweighed by negative aspects associated with producing that outcome
- C. Maintaining that the benefit that the spokesperson desires could be achieved in greater degree by a different means
- D. Claiming that the spokesperson is deliberately misrepresenting the environmentalist's position in order to be better able to attack it
- E. Denying that an effect that the spokesperson presents as having benefited a certain group of people actually benefited those people
- 96. **Proposal**: Carbon dioxide and methane in the atmosphere block the escape of heat into space. So emission of these "greenhouse" gases contributes to global warming. In order to reduce global warming, emission of greenhouse gases needs to be reduced. Therefore, the methane now emitted from open landfills should instead be burned to produce electricity.

Objection: The burning of methane generates carbon dioxide that is released into the atmosphere.

Which of the following, if true, most adequately counters the objection made to the proposal?

- A. Every time a human being or other mammal exhales, there is some carbon dioxide released into the air.
- B. The conversion of methane to electricity would occur at a considerable distance from the landfills.
- C. The methane that is used to generate electricity would generally be used as a substitute for a fuel that does not produce any greenhouse gases when burned.
- D. Methane in the atmosphere is more effective in blocking the escape of heat from the Earth than is carbon dioxide.
- E. The amount of methane emitted from the landfills could be reduced if the materials whose decomposition produces methane were not discarded, but recycled.

- **97.** It is theoretically possible that bacteria developed on Mars early in its history and that some were carried to Earth by a meteorite. However, strains of bacteria from different planets would probably have substantial differences in protein structure that would persist over time, and no two bacterial strains on Earth are different enough to have arisen on different planets. So, even if bacteria did arrive on Earth from Mars, they must have died out. **The argument is most vulnerable to which of the following criticisms?**
- A. It fails to establish whether bacteria actually developed on Mars.
- B. It fails to establish how likely it is that Martian bacteria were transported to Earth.
- C. It fails to consider whether there were means other than meteorites by which Martian bacteria could have been carried to Earth.
- D. It fails to consider whether all bacteria now on Earth could have arisen from transported Martian bacteria.
- E. It fails to consider whether there could have been strains of bacteria that originated on Earth and later died out.
- **98.** Unless tiger hunting decreases, tigers will soon be extinct in the wild. The countries in which the tigers' habitats are located are currently debating joint legislation that would ban tiger hunting. Thus, if these countries can successfully enforce this legislation, the survival of tigers in the wild will be ensured. **The reasoning in the argument is most vulnerable to criticism on the grounds that the argument**
- A. assumes without sufficient warrant that a ban on tiger hunting could be successfully enforced
- B. considers the effects of hunting on tigers without also considering the effects of hunting on other endangered animal species
- C. fails to take into account how often tiger hunters are unsuccessful in their attempts to kill tigers
- D. neglects to consider the results of governmental attempts in the past to limit tiger hunting
- E. takes the removal of an impediment to the tigers' survival as a guarantee of their survival
- **99.** Yeasts capable of leavening bread are widespread, and in the many centuries during which the ancient Egyptians made only unleavened bread, such yeasts must frequently have been mixed into bread doughs accidentally. The Egyptians, however, did not discover leavened bread until about 3000 B.C. That discovery roughly coincided with the introduction of a wheat variety that was preferable to previous varieties because its edible kernel could be removed from the husk without first toasting the grain. **Which of the following, if true, provides the strongest evidence that the two developments were causally related?**
- A. Even after the ancient Egyptians discovered leavened bread and the techniques for reliably producing it were well known, unleavened bread continued to be widely consumed.
- B. Only when the Egyptians stopped the practice of toasting grain were their stonelined grain-toasting pits available for baking bread.
- C. Heating a wheat kernel destroys its gluten, a protein that must be present in order for yeast to leaven bread dough.
- D. The new variety of wheat, which had a more delicate flavor because it was not toasted, was reserved for the consumption of high officials when it first began to be grown.
- E. Because the husk of the new variety of wheat was more easily removed, flour made from it required less effort to produce.

100. **Mayor:** Migrating shorebirds stop at our beach just to feed on horseshoe-crab eggs, a phenomenon that attracts tourists. To bring more tourists, the town council plans to undertake a beach reclamation project to double the area available to crabs for nesting.

Birdwatcher: Without a high density of crabs on a beach, migrating shorebirds will go hungry because shorebirds only eat eggs that a crab happens to uncover when it is digging its own nest. Which of the following, if true, would provide the mayor with the strongest counter to the birdwatcher's objection?

- A. Every year a certain percentage of crabs are caught by fishermen as bait for eel traps.
- B. Horseshoe crabs are so prolific that given favorable circumstances their numbers increase rapidly.
- C. On average, tourists who come to the town in order to watch birds spend more money there than tourists who come for other purposes.
- D. The additional land made available by the reclamation project will give migrating shorebirds more space.
- E. Some of the migrating shorebirds make only one stop during their migration form South America to Canada.
- **101.** A theory is either true or false. Galileo's observations of Jupiter's satellites showed that the Ptolemaic theory of the motion of celestial bodies is false. Therefore, since the Copernican theory of planetary motion is inconsistent with the Ptolemaic account, Galileo's observations of Jupiter's satellites proved the truth of the Copernican theory. **The argument above is open to the objection that it makes the questionable assumption that**
- A. whoever first observed something inconsistent with the truth of the Ptolemaic theory should be credited with having proved that theory false
- B. there are some possible observations that would be inconsistent with the account given by the Copernican theory but consistent with the account given by the Ptolemaic theory
- C. the Ptolemaic and Copernican theories, being inconsistent, cannot both be based on exactly the same evidence
- D. numerous counterexamples were necessary in order to show the Ptolemaic theory to be false
- E. the Ptolemaic and Copernican theories, being inconsistent, cannot both be false
- **102.** In one state, all cities and most towns have antismoking ordinances. A petition entitled "Petition for Statewide Smoking Restriction" is being circulated to voters by campaign workers who ask only, "Do you want to sign a petition for statewide smoking restriction?" The petition advocates a state law banning smoking in most retail establishments and in government offices that are open to the public. **Which of the following circumstances would make the petition as circulated misleading to voters who understand the proposal as extending the local ordinances statewide?**
- A. Health costs associated with smoking cause health insurance premiums to rise for everyone and so affect nonsmokers.
- B. In rural areas of the state, there are relatively few retail establishments and government offices that are open to the public.
- C. The state law would supersede the local antismoking ordinances, which contain stronger bans than the state law does.
- D. There is considerable sentiment among voters in most areas of the state for restriction of smoking.
- E. The state law would not affect existing local ordinances banning smoking in places where the fire authorities have determined that smoking would constitute a fire hazard.

- 103. The violent crime rate (number of violent crimes per 1,000 residents) in Meadowbrook is 60 percent higher now than it was four years ago. The corresponding increase for Parkdale is only 10 percent. These figures support the conclusion that residents of Meadowbrook are more likely to become victims of violent crime than are residents of Parkdale. The argument above is flawed because it fails to take into account
- A. changes in the population density of both Parkdale and Meadowbrook over the past four years
- B. how the rate of population growth in Meadowbrook over the past four years compares to the corresponding rate for Parkdale
- C. the ratio of violent to nonviolent crimes committed during the past four years in Meadowbrook and Parkdale
- D. the violent crime rates in Meadowbrook and Parkdale four years ago
- E. how Meadowbrook's expenditures for crime prevention over the past four years compare to Parkdale's expenditures
- 104. The town of Enderton is located in an area where forest fires are quite common. During dry periods and periods of persistent winds, when even a spark can result in a fire that spreads over many acres, the danger of fire there is particularly serious. To help prevent forest fires in the area, the town government plans to post a ban on outdoor fires when such conditions prevail. Which of the following, if true, provides the strongest indication that the town's plan will have at most a minor effect on the annual number of forest fires in the Enderton area?
- A. Most of the tourists who visit the forests surrounding Enderton also visit Enderton itself.
- B. Although there are county fire fighters available to combat forest fires in the area, Enderton itself has no professional fire fighters.
- C. Very few forest fires in the Enderton area result from fires deliberately set by arsonists.
- D. Nearly all forest fires in the Enderton area are the result of lightning strikes.
- E. The number of forest fires in the Enderton area has not increased significantly in the last several years.
- 105. Mel: The official salary for judges has always been too low to attract the best candidates to the job. The legislature's move to raise the salary has done nothing to improve the situation, because it was coupled with a ban on receiving money for lectures and teaching engagements.
 Pat: No, the raise in salary really does improve the situation. Since very few judges teach or give lectures, the ban will have little or no negative effect.

Pat's response to Mel is inadequate in that it

- A. attempts to assess how a certain change will affect potential members of a group by providing evidence about its effect on the current members.
- B. mistakenly takes the cause of a certain change to be an effect of that change
- C. attempts to argue that a certain change will have a positive effect merely by pointing to the absence of negative effects
- D. simply denies Mel's claim without putting forward any evidence in support of that denial
- E. assumes that changes that benefit the most able members of a group necessarily benefit all members of that group.

When people engage in activities that help others, their brain releases endorphins, the brain's natural opiates, which induce in people a feeling of well-being. It has been suggested that regular release of endorphins increases people's longevity. And a statistic on adults who regularly engage in volunteer work helping others shows that they live longer, on average, than adults who do not volunteer. However, that statistic would be what we would expect even if volunteering does not boost longevity, because _______.

- A. in the communities studied, women were much more likely to do regular volunteer work than men were, and women tend to live longer than men do.
- B. the number of young adults who do regular volunteer work is on the increase
- C. the feelings of well-being induced by endorphins can, at least for a time, mask the symptoms of various conditions and diseases, provided the symptoms are mild.
- D. it is rare for a person to keep up a regular schedule of volunteer work throughout his or her life.
- E. Some people find that keeping a commitment to do regular volunteer work becomes a source of stress in their lives.
- 107. In Patton City, days are categorized as having heavy rainfall (more than two inches), moderate rainfall (more than one inch, but no more than two inches), light rainfall (at least a trace, but no more than one inch), or no rainfall. In 1990, there were fewer days with light rainfall than in 1910 and fewer with moderate rainfall, yet total rainfall for the year was 20 percent higher in 1990 than in 1910. If the statements above are true, then it is also possible that in Patton City
- A. the number of days with heavy rainfall was lower in 1990 than in 1910
- B. the number of days with some rainfall, but no more than two inches, was the same in 1990 as in 1910
- C. the number of days with some rainfall, but no more than two inches, was higher in 1990 than in 1910
- D. the total number of inches of rain that fell on days with moderate rainfall in 1990 was more than twice what it had been in 1910
- E. the average amount of rainfall per month was lower in 1990 than in 1910
- 108. **Background information:** This year, each film submitted to the Barbizon Film Festival was submitted in one of ten categories. For each category, there was a panel that decided which submitted films to accept.
 - **Fact 1:** Within each category, the rate of acceptance for domestic films was the same as that for foreign films.
 - **Fact 2:** The overall rate of acceptance of domestic films was significantly higher than that of foreign films.

In light of the background information, which of the following, if true, can account for fact 1 and fact 2 both being true of the submissions to this year's Barbizon Film Festival?

- A. In each category, the selection panel was composed of filmmakers, and some selection panels included no foreign filmmakers.
- B. Significantly more domestic films than foreign films were submitted to the festival.
- C. In each of the past three years, the overall acceptance rate was higher for foreign than for domestic films, an outcome that had upset some domestic filmmakers.
- D. The number of films to be selected in each category was predetermined, but in no category was it required that the acceptance rate of foreign films should equal that of domestic films.
- E. Most foreign films, unlike most domestic films, were submitted in categories with high prestige, but with correspondingly low rates of acceptance.

- 109. Investment banks often have conflicting roles. They sometimes act for a client company by raising capital from other investment institutions as advantageously as possible, but their analysts also sometimes send unfavorable reports on the financial health of companies for whom they are raising capital to other clients who wish to make investments. Analyses of companies' financial health need to be unbiased if an investment bank is to achieve long-term success. If the statements above are true, which of the following practices, if adopted by an investment bank, would hinder its long-term success?
- A. Evaluating and rewarding the bank's analysts on the basis of recommendations made by managers who are solely engaged in raising capital for clients
- B. Using reports by the investment bank's analysts to determine how best to raise capital for a client
- C. Sharing the task of raising capital for a client with other investment banks
- D. Ensuring that conflicts between analysts and those who raise capital for clients are carefully mediated and resolved by impartial arbitrators
- E. Monitoring the success or failure of analysts' current predictions about how companies will perform financially, in order to determine the value of future predictions
- 110. Tiger beetles are such fast runners that they can capture virtually any non-flying insect. However, when running toward an insect, a tiger beetle will intermittently stop and then, a moment later, resume its attack. Perhaps the beetles cannot maintain their pace and must pause for a moment's rest; but an alternative hypothesis is that while running, tiger beetles are unable to adequately process the resulting rapidly changing visual information and so quickly go blind and stop. Which of the following, if discovered in experiments using artificially moved prey insects, would support one of the two hypotheses and undermine the other?
- A. When a prey insect is moved directly toward a beetle that has been chasing it, the beetle immediately stops and runs away without its usual intermittent stopping.
- B. In pursuing a swerving insect, a beetle alters its course while running and its pauses become more frequent as the chase progresses.
- C. In pursuing a moving insect, a beetle usually responds immediately to changes in the insect's direction, and it pauses equally frequently whether the chase is up or down an incline.
- D. If, when a beetle pauses, it has not gained on the insect it is pursuing, the beetle generally ends its pursuit.
- E. The faster a beetle pursues an insect fleeing directly away from it, the more frequently the beetle stops.

- 111. Smithtown University's fund-raisers succeeded in getting donations from 80 percent of the potential donors they contacted. This success rate, exceptionally high for university fund-raisers, does not indicate that they were doing a good job. On the contrary, since the people most likely to donate are those who have donated in the past, good fund-raisers constantly try less-likely prospects in an effort to expand the donor base. The high success rate shows insufficient canvassing effort. Which of the following, if true, provides more support for the argument?
- A. Smithtown University's fund-raisers were successful in their contacts with potential donors who had never given before about as frequently as were fund-raisers for other universities in their contacts with such people.
- B. This year the average size of the donations to Smithtown University from new donors when the university's fund-raisers had contacted was larger than the average size of donations from donors who had given to the university before.
- C. This year most of the donations that came to Smithtown University from people who had previously donated to it were made without the university's fund-raisers having made any contact with the donors.
- D. The majority of the donations that fund-raisers succeeded in getting for Smithtown University this year were from donors who had never given to the university before.
- E. More than half of the money raised by Smithtown University's fund-raisers came from donors who had never previously donated to the university.
- 112. Political Advertisement: Mayor Delmont's critics complain about the jobs that were lost in the city under Delmont's leadership. Yet the fact is that not only were more jobs created than were eliminated, but the average pay for these new jobs has been higher than the average pay for jobs citywide every year since Delmont took office. So there can be no question that throughout Delmont's tenure the average paycheck in this city has been getting steadily bigger. Which of the following, if true, most strengthens the argument in the advertisement?
- A. The average pay for jobs created in the city during the past three years was higher than the average pay for jobs created in the city earlier in Mayor Delmont's tenure.
- B. Average pay in the city was at a ten-year low when Mayor Delmont took office.
- C. Some of the jobs created in the city during Mayor Delmont's tenure have in the meantime been eliminated again.
- D. The average pay for jobs eliminated in the city during Mayor Delmont's tenure has been roughly equal every year to the average pay for jobs citywide.
- E. The average pay for jobs in the city is currently higher than it is for jobs in the suburbs surrounding the city.

Each species of moth has an optimal body temperature for effective flight, and when air temperatures fall much below that temperature, the moths typically have to remain inactive on vegetation for extended periods, leaving them highly vulnerable to predators. In general, larger moths can fly faster than smaller ones and hence have a better chance of evading flying predators, but they also have higher optimal body temperatures, which explains why ______.

- A. large moths are generally able to maneuver better in flight than smaller moths
- B. large moths are proportionally much more common in warm climates than in cool climates
- C. small moths are more likely than large moths to be effectively camouflaged while on vegetation
- D. large moths typically have wings that are larger in proportion to their body size than smaller moths do
- E. most predators of moths prey not only on several different species of moth but also on various species of other insects

114. Which of the following, if true, most logically completes the passage?

A recent poll found that over 80 percent of the residents of Nalmed Province favored a massive expansion of the commuter rail system as a means of significantly easing congestion on the province's highways and were willing to help pay for the expansion through an increase in their taxes. Nevertheless, the poll results indicate that expansion of the rail system, if successfully completed, would be unlikely to achieve its goal of easing congestion, because _____.

- A. most people in favor of expanding the rail system reported less congestion during their highway commute as the primary benefit they would experience
- B. of the less than 20 percent of residents not counted as favoring the expansion, about half claimed to have no opinion one way or the other
- C. the twice-daily periods of peak congestion caused by people commuting in cars have grown from about an hour each to almost two and a half hours each in the past 20 years
- D. expanding the commuter rail system will require the construction of dozens of miles of new railbed
- E. the proposed expansion to the commuter rail system will make it possible for some people who both live and work at suburban locations to commute by rail
- 115. Every fall Croton's jays migrate south. The jays always join flocks of migrating crookbeaks with which they share the same summer and winter territories. If a jay from the crookbeaks it is accompanying, it wanders until it comes across another flock of crookbeaks. Clearly, therefore, Croton's jays lack the navigational ability to find their way south on their own. Which of the following, if true, most strengthens the argument?
- A. Croton's jays lay their eggs in the nests of crookbeaks which breed upon completing their southern migration.
- B. The three species most closely related to crookbeaks do not migrate at all.
- C. In the spring, Croton's jays migrate north in the company of Tattersall warblers.
- D. Species other than Croton's jays occasionally accompany flocks of migrating crookbeaks.
- E. In the spring, crookbeaks migrate north before croton's jays do.

Appendicitis (inflammation of the appendix) is potentially fatal; consequently, patients with symptoms strongly suggesting appendicitis almost always have their appendix removed. The appropriate surgery is low-risk but performed unnecessarily in about 20 percent of all cases. A newly developed internal scan for appendicitis is highly accurate, producing two misdiagnoses for every 98 correct diagnoses. Clearly, using this test, doctors can largely avoid unnecessary removals of the appendix without, however, performing any fewer necessary ones than before, since

- A. the patients who are correctly diagnosed with this test as not having appendicitis invariably have medical conditions that are much less serious than appendicitis
- B. the misdiagnoses produced by this test are always instances of attributing appendicitis to someone who does not, in fact, have it
- C. all of the patients who are diagnosed with this test as having appendicitis do, in fact, have appendicitis
- D. every patient who is diagnosed with this test as having appendicitis has more than one of the symptoms generally associated with appendicitis
- E. the only patients who are misdiagnosed using this test are patients who lack one or more of the symptoms that are generally associated with appendicitis
- 117. Although the discount stores in Goreville's central shopping district are expected to close within five years as a result of competition from a SpendLess discount department store that just opened, those locations will not stay vacant for long. In the five years since the opening of Colson's, a non-discount department store, a new store has opened at the location of every store in the shopping district that closed because it could not compete with Colson's. Which of the following, if true, most seriously weakens the argument?
- A. Many customers of Colson's are expected to do less shopping there than they did before the SpendLess store opened.
- B. Increasingly, the stores that have opened in the central shopping district since Colson's opened have been discount stores.
- C. At present, the central shopping district has as many stores operating in it as it ever had.
- D. Over the course of the next five years, it is expected that Goreville's population will grow at a faster rate than it has for the past several decades.
- E. Many stores in the central shopping district sell types of merchandise that are not available at either SpendLess or Colson's.
- 118. In two months, the legal minimum wage in the country of Kirlandia will increase from five Kirlandic dollars (KD5.00) Per hour to KD5.50 per hour. Opponents of this increase have argued that the resulting rise in wages will drive the inflation rate up. In fact its impact on wages will probably be negligible, since only a very small proportion of all Kirlandic workers are currently receiving less than KD5.50 per hour. Which of the following, if true, most seriously weakens the argument?
- A. Most people in Kirlandia who are currently earning the minimum wage have been employed at their current jobs for less than a year.
- B. Some firms in Kirlandia have paid workers considerably less than KD5.00 per hour, in violation of Kirlandic employment regulations.
- C. Many businesses hire trainees at or near the minimum wage but must reward trained workers by keeping their pay levels above the pay level of trainees.
- D. The greatest growth in Kirlandia's economy in recent years has been in those sectors where workers earn wages that tend to be much higher than the minimum wage.
- E. The current minimum wage is insufficient for a worker holding only one job to earn enough to support a family, even when working full time at that job.

- 119. In Kantovia, physicians' income comes from insurance companies, which require physicians to document their decisions in treating patients and to justify deviations from the companies' treatment guidelines. Ten years ago physicians were allowed more discretion. Most physicians believe that the companies' requirements now prevent them from spending enough time with patients. Yet the average amount of time a patient spends with a physician during an office visit has actually increased somewhat over the last ten years. Which of the following, if true, most helps to resolve the apparent discrepancy between physicians' perceptions and the change in the actual time spent?
- A. Patients are more likely to be in a hurry nowadays and are less willing to wait a long time to see their physician.
- B. Physicians today typically have a wider range of options in diagnosis and treatment to consider with the patient before prescribing.
- C. Physicians are increasingly likely to work in group practices, sharing the responsibility of night and weekend work.
- D. Most patients would rather trust their physicians than their insurance companies to make decisions about their treatment.
- E. Since the insurance companies pay physicians a set amount for each office visit, it is to physicians' financial advantage to see as many patients as possible.
- 120. Springfield Fire Commissioner: The vast majority of false fire alarms are prank calls made anonymously from fire alarm boxes on street corners. Since virtually everyone has access to a private telephone, these alarm boxes have outlived their usefulness. Therefore, we propose to remove the boxes. Removing the boxes will reduce the number of prank calls without hampering people's ability to report a fire. Which of the following, if true, most strongly supports the claim that the proposal, if carried out, will have the announced effect?
- A. The fire department traces all alarm calls made from private telephones and records where they came from.
- B. Maintaining the fire alarm boxes costs Springfield approximately five million dollars annually.
- C. A telephone call can provide the fire department with more information about the nature and size of a fire than can an alarm placed from an alarm box.
- D. Responding to false alarms significantly reduces the fire department's capacity for responding to fires.
- E. On any given day, a significant percentage of the public telephones in Springfield are out of service.
- 121. People who have spent a lot of time in contact with animals often develop animal-induced allergies, some of them quite serious. In a survey of current employees in major zoos, about 30 percent had animal-induced allergies. Based on this sample, experts conclude that among members of the general population who have spent a similarly large amount of time in close contact with animals, the percentage with animal-induced allergies is not 30 percent but substantially more. Which of the following, if true, provides the strongest grounds for the experts' conclusion?
- A. A zoo employee who develops a serious animal-induced allergy is very likely to switch to some other occupation.
- B. A zoo employee is more likely than a person in the general population to keep one or more animal pets at home
- C. The percentage of the general population whose level of exposure to animals matches that of a zoo employee is quite small.
- D. Exposure to domestic pets is, on the whole, less likely to cause animal induced allergy than exposure to many of the animals kept in zoos.
- E. Zoo employees seldom wear protective gear when they handle animals in their care.

- 122. People who have spent a lot of time in contact with animals often develop animal-induced allergies, a significant percentage of which are quite serious. In a survey of current employees in major zoos, about 30 percent had animal-induced allergies. However, a zoo employee who develops a serious animal-induced allergy is very likely to switch to some other occupation. Which of the following hypotheses receives the strongest support from the information given?
- A. The incidence of serious animal-induced allergies among current zoo employees is lower than that among the general population.
- B. Zoo employees tend to develop animal-induced allergies that are more serious than those of other people who spend equally large amounts of time with animals.
- C. Exposure to domestic pets is, on the whole, less likely to cause animal-induced allergy than is exposure to the kinds of animals that are kept in zoos.
- D. There is no occupation for which the risk of developing an animal-induced allergy is higher than 30 percent.
- E. Among members of the general population who have spent as much time with animals as zoo employees typically have, the percentage with animal-induced allergies is significantly more than 30 percent.

A certain cultivated herb is one of a group of closely related plants that thrive in soil with high concentrations of metals that are toxic to most other plants. Agronomists studying the herb have discovered that it produces large amounts of histidine, an amino acid that, in test-tube solutions, renders these metals chemically inert. Possibly, therefore, the herb's high histidine production is what allows it to grow in metal-rich soils, a hypothesis that would gain support if

- A. histidine is found in all parts of the plant—roots, stem, leaves, and flowers
- B. the herb's high level of histidine production is found to be associated with an unusually low level of production of other amino acids
- C. others of the closely related group of plants are also found to produce histidine in large quantities
- D. cultivation of the herb in soil with high concentrations of the metals will, over an extended period, make the soil suitable for plants to which the metals are toxic
- E. the concentration of histidine in the growing herb declines as the plant approaches maturity
- **124.** Manatees, aquatic mammals inhabiting Florida's rivers and coastal waters, swim close to the surface and are frequently killed in collisions with boats. To address the problem, boat traffic in manatee-populated waters is being required to maintain very low speeds. Unfortunately, manatees are unable to hear low-pitched sounds and a boat's sound lowers in pitch as the boat slows. Therefore, this approach may in fact make things worse rather than better. **Which of the following, if true, casts most doubt on the conclusion?**
- A. The areas where boats would have to maintain low speeds were decided partly on the basis of manatee-population estimates and partly from numbers of reported collisions between manatees and boats.
- B. Because the water hyacinth that manatees feed on grows best in water that is nearly still, water hyacinth beds can be disturbed or damaged by fast-moving boat traffic.
- C. Over the last several decades, boat traffic in Florida's coastal waters has been increasing almost continuously and now represents the greatest threat to the endangered manatee population.
- D. The sound of a boat engine generally travels much further under water than it does through the air.
- E. When experimenters exposed manatees to the recorded sounds of boats moving at various speeds, the creatures were unable to discern the sounds over normal background noise.

125. In Rubaria, excellent health care is available to virtually the entire population, whereas very few people in Terland receive adequate medical care. Yet, although the death rate for most diseases is higher in Terland than in Rubaria, the percentage of the male population that dies from prostate cancer is significantly higher in Rubaria than in Terland.

Which of the following, if true, most helps to explain the disparity between the prostate cancer death rate in Rubaria and Terland?

- A. Effective treatment of prostate cancer in its early stages generally requires medical techniques available in Rubaria but not in Terland.
- B. Most men who have prostate cancer are older than the average life expectancy for male inhabitants of Terland.
- C. Being in poor general health does not increase one's risk of developing prostate cancer.
- D. It is possible to decrease one's risk of getting prostate cancer by eating certain kinds of foods, and such foods are more readily available in Rubaria than in Terland.
- E. Among men in Rubaria, the death rate from prostate cancer is significantly higher for those who do not take full advantage of Rubaria's health care system than for those who do.
- 126. Parland's alligator population has been declining in recent years, primarily because of hunting. Alligators prey heavily on a species of freshwater fish that is highly valued as food by Parlanders, who had hoped that the decline in the alligator population would lead to an increase in the numbers of these fish available for human consumption. Yet the population of this fish species has also declined, even though the annual number caught for human consumption has not increased. Which of the following, if true, most helps to explain the decline in the population of the fish species?
- A. The decline in the alligator population has meant that fishers can work in some parts of lakes and rivers that were formerly too dangerous.
- B. Over the last few years, Parland's commercial fishing enterprises have increased the number of fishing boats they use.
- C. Many Parlanders who hunt alligators do so because of the high market price of alligator skins, not because of the threat alligators pose to the fish population.
- D. During Parland's dry season, holes dug by alligators remain filled with water long enough to provide a safe place for the eggs of this fish species to hatch.
- E. In several neighboring countries through which Parland's rivers also flow, alligators are at risk of extinction as a result of extensive hunting.
- 127. Kernland imposes a high tariff on the export of unprocessed cashew nuts in order to ensure that the nuts are sold to domestic processing plants. If the tariff were lifted and unprocessed cashews were sold at world market prices, more farmers could profit by growing cashews. However, since all the processing plants are in urban areas, removing the tariff would seriously hamper the government's effort to reduce urban unemployment over the next five years. Which of the following, if true, most seriously weakens the argument?
- A. Some of the byproducts of processing cashews are used for manufacturing paints and plastics.
- B. Other countries in which cashews are processed subsidize their processing plants.
- C. More people in Kernland are engaged in farming cashews than in processing them.
- D. Buying unprocessed cashews at lower than world market prices enables cashew processors in Kernland to sell processed nuts at competitive prices
- E. A lack of profitable crops is driving an increasing number of small farmers in Kernland off their land and into the cities.

- 128. Twelve years ago and again five years ago, there were extended periods when Darfir Republic's currency, the pundra, was weak: its value was unusually low relative to the world's most stable currencies. Both times a weak pundra made Darfir's manufactured products a bargain on the world markets, and Darfir's exports were up substantially. Now some politicians are saying that, in order to cause another similarly sized increase in exports, the government should allow the pundra to become weak again. Which of the following if true provides the government with the strongest grounds to doubt the politician's recommendation, if followed, will achieve its aim?
- A. several of the politicians no recommending that the pundra be allowed to become weak made that same recommendation before each of the last two periods of currency weakness.
- B. after several decades of operating well below its peak capacity, Darfir's manufacturing sector is now operating at near-peak levels
- C. the economy of a country experiencing a rise in exports will become healthier only if the country's currency is strong or the rise in exports is significant.
- D. those countries whose manufactured products compete with Darfir's on the world market currently all have stable currencies
- E. a sharp improvement in the efficiency of Darfir's manufacturing plants would make Darfir's products a bargain on the world markets even without weakening of the pundra relative to other currencies.

Latest – all other types of questions – mixed-bag

- 1. In the United States, of the people who moved from one state to another when they retired, the percentage who retired to Florida has decreased by three percentage points over the past ten years. Since many local businesses in Florida cater to retirees, this decline is likely to have a noticeably negative economic effect on these businesses. Which of the following, if true, most seriously weakens the argument?
- A. Florida attracts more people who move from one state to another when they retire than does any other state.
- B. The number of people who move out of Florida to accept employment in other states has increased over the past ten years.
- C. There are far more local businesses in Florida that cater to tourists than there are local businesses that cater to retirees.
- D. The total number of people who retired and moved to another state for their retirement has increased significantly over the past ten years.
- E. The number of people who left Florida when they retired to live in another state was greater last year than it was ten years ago.
- 2. That the application of new technology can increase the productivity of existing coal mines is demonstrated by the case of Tribnia's coal industry. Coal output per miner in Tribnia is double what it was five years ago, even though no new mines have opened. Which of the following can be properly concluded from the statement about coal output per miner in the passage?
- A. If the number of miners working in Tribnian coal mines has remained constant in the past five years, Tribnia's total coal production has doubled in that period of time.
- B. Any individual Tribnian coal mine that achieved an increase in overall output in the past five years has also experienced an increase in output per miner.
- C. If any new coal mines had opened in Tribnia in the past five years, then the increase in output per miner would have been even greater than it actually was.
- D. If any individual Tribnian coal mine has not increased its output per miner in the past five years, then that mine's overall output has declined or remained constant.
- E. In Tribnia the cost of producing a given quantity of coal has declined over the past five years.

- **3.** In parts of South America, vitamin-A deficiency is a serious health problem, especially among children. In one region, agriculturists are attempting to improve nutrition by encouraging farmers to plant a new variety of sweet potato called SPK004 that is rich in beta-carotene, which the body converts into vitamin A. The plan has good chances of success, since sweet potato is a staple of the region's diet and agriculture, and the varieties currently grown contain little beta-carotene. **Which of the following, if true, most strongly supports the prediction that the plan will succeed?**
- A. The growing conditions required by the varieties of sweet potato currently cultivated in the region are conditions in which SPK004 can flourish.
- B. The flesh of SPK004 differs from that of the currently cultivated sweet potatoes in color and texture, so traditional foods would look somewhat different when prepared from SPK004.
- C. There are no other varieties of sweet potato that are significantly richer in beta-carotene than SPK004 is.
- D. The varieties of sweet potato currently cultivated in the region contain some important nutrients that are lacking in SPK004.
- E. There are other vegetables currently grown in the region that contain more beta-carotene than the currently cultivated varieties of sweet potato do.
- **4.** The spacing of the four holes on a fragment of a bone flute excavated at a Neanderthal campsite is just what is required to play the third through sixth notes of the diatonic scale—the seven-note musical scale used in much of Western music since the Renaissance. Musicologists therefore hypothesize that the diatonic musical scale was developed and used thousands of years before it was adopted by Western musicians. **Which of the following, if true, most strongly supports the hypothesis?**
- A. Bone flutes were probably the only musical instrument made by Neanderthals.
- B. No musical instrument that is known to have used a diatomic scale is of an earlier date than the flute found at the Neanderthal campsite.
- C. The flute was made from a cave-bear bone and the campsite at which the flute fragment was excavated was in a cave that also contained skeletal remains of cave bears.
- D. Flutes are the simplest wind instrument that can be constructed to allow playing a diatonic scale.
- E. The cave-bear leg bone used to make the Neanderthal flute would have been long enough to make a flute capable of playing a complete diatonic scale.

Davison River farmers are currently deciding between planting winter wheat this fall or spring wheat next spring. Winter wheat and spring wheat are usually about equally profitable. Because of new government restrictions on the use of Davison River water for irrigation, per acre yields for winter wheat, though not for spring wheat, would be much lower than average. Therefore, planting spring wheat will be more profitable than planting winter wheat, since_____.

- A. the smaller-than-average size of a winter wheat harvest this year would not be compensated for by higher winter wheat prices
- B. new crops of spring wheat must be planted earlier than the time at which standing crops of winter wheat are ready to be harvested
- C. the spring wheat that farmers in the Davison River region plant is well adapted to the soil of the region
- D. spring wheat has uses that are different from those of winter wheat
- E. planting spring wheat is more profitable than planting certain other crops, such as rye
- 6. A company plans to develop a prototype weeding machine that uses cutting blades with optical sensors and microprocessors that distinguish weeds from crop plants by differences in shade of color. The inventor of the machine claims that it will reduce labor costs by virtually eliminating the need for manual weeding. Which of the following is a consideration in favor of the company's implementing its plan to develop the prototype?
- A. There is a considerable degree of variation in shade of color between weeds of different species.
- B. The shade of color of some plants tends to change appreciably over the course of their growing season.
- C. When crops are weeded manually, overall size and leaf shape are taken into account in distinguishing crop plants from weeds.
- D. Selection and genetic manipulation allow plants of virtually any species to be economically bred to have a distinctive shade of color without altering their other characteristics.
- E. Farm laborers who are responsible for the manual weeding of crops carry out other agricultural duties at times in the growing season when extensive weeding is not necessary.

7. Which of the following most logically completes the passage below?

Heavy rains during Centralia's corn planting season prevented some farmers there from planting corn. It is now the planting season for soybeans, another of Centralia's principal crops, and those fields originally intended for corn are dry enough for planting. Nonetheless, even though soybean prices are unusually high at present, the farmers will leave most of these fields empty rather than plant them with soybeans, since _____.

- A. the extensive rains have led to an increase in the price of corn
- B. some Centralian farmers anticipate serious financial losses due to the extremely wet spring planting season
- C. chemicals that were used to prepare the fields for corn planting would stunt the growth of sovbeans
- D. the majority of Centralia's corn farmers were able to plant corn as they had intended, despite the wet planting season
- E. many Centralian farmers grow both corn and soybeans

8. Which of the following most logically completes the argument?

Yorco and Zortech are two corporations that employ large numbers of full-time workers who are paid by the hour. Publicly available records indicate that Yorco employs roughly the same number of such hourly wage workers as Zortech does but spends a far higher total sum per year on wages for such workers. Therefore, hourly wages must be higher, on average, at Yorco than at Zortech, since _____.

- A. Zortech spends a higher total sum per year than Yorco does to provide its hourly wage workers with benefits other than wages
- B. the work performed by hourly wage workers at Zortech does not require a significantly higher level of skill than the work performed by hourly wage workers at Yorco does
- C. the proportion of all company employees who are hourly wage workers is significantly greater at Yorco than it is at Zortech
- D. overtime work, which is paid at a substantially higher rate than work done during the regular work week, is rare at both Yorco and Zortech
- E. the highest hourly wages paid at Yorco are higher than the highest hourly wages paid at Zortech

- **9.** The quality of unrefined olive oil is not actually defined in terms of acidity, yet extensive tests have shown that the less free oleic acid an unrefined olive oil contains per liter, the higher its quality. The proportion of free oleic acid that an olive oil contains is an accurate measure of the oil's acidity. **If the statements above are all true, which of the following conclusions is best supported by them?**
- A. When an olive oil is refined, the concentration of oleic acid in the oil is reduced.
- B. The quality of an unrefined olive oil can be determined only by accurately measuring its acidity.
- C. If an unrefined olive oil is intermediate in acidity between two other unrefined olive oils, it will also be intermediate between them in quality.
- D. Free oleic acid is the only acid that unrefined olive oil contains.
- E. People who judge the quality of unrefined olive oils actually judge those oils by their acidity, which the judges can taste.
- 10. Sunflowers growing in pots were placed, with their roots submerged, in the pond contaminated with radioactive elements. The sunflowers kept growing; in the process, they absorbed radioactive elements. Within twelve days, 85 percent of the radioactive elements were removed from the water, which is no less than can be accomplished with the much more expensive conventional filtration techniques. Scientists therefore propose using sunflowers for decontamination wherever there are radioactively contaminated ponds. Which of the following, if true, points to a limitation on the applicability of the proposed method of decontamination?
- A. Some plants other than sunflowers can also remove radioactive elements from water.
- B. The water in many ponds contaminated with radioactive elements is so cold that it would kill sunflowers whose roots were submerged in it.
- C. Sunflowers that grow with their roots submerged in water grow less well than sunflowers growing under optimal conditions on dry land.
- D. Only species of sunflowers with large leaves can have their roots submerged in water and still keep growing.
- E. In ponds in which the circulation of the water is artificially increased, sunflowers absorb radioactive elements far faster than they do in other ponds.

Concerned about financial well-being of its elderly citizens, the government of Runagia decided two years ago to increase by 20 percent the government-provided pension paid to all Runagians over 65. Inflation in the intervening period has been negligible, and the increase has been duly received by all eligible Runagians. Nevertheless, many of them are no better off financially than they were before the increase, in large part because

- A. They rely entirely on the government pension for their income
- B. Runagian banks are so inefficient that it can take up to three weeks to cash a pension check
- C. They buy goods whose prices tend to rise especially fast in times of inflation
- D. The pension was increased when the number of elderly Runagians below the poverty level reached an all-time high
- E. In Runagia children typically supplement the income of elderly parents, but only by enough to provide them with a comfortable living

12. Which of the following most logically completes the passage?

Garnet and RenCo each provide health care for their employees. Garnet pays for both testing of its employees' cholesterol levels and treatment of high cholesterol. This policy saves Garnet money, since high cholesterol left untreated for many years leads to conditions that require very expensive treatment. However, RenCo does not have the same financial incentive to adopt such a policy, because _____.

- A. early treatment of high cholesterol dose not entirely eliminate the possibility of a stroke later in life
- B. the mass media regularly feature stories encouraging people to maintain diets that are low in cholesterol
- C. RenCo has significantly more employees than Garnet has
- D. RenCo's employees are unlikely to have higher cholesterol levels than Garnet's employees
- E. the average length of time an employee stays with RenCo is less than it is with Garnet

- 13. Studies in restaurants show that the tips left by customers who pay their bill in cash tend to be larger when the bill is presented on a tray that bears a credit-card logo. Consumer psychologists hypothesize that simply seeing a credit-card logo makes many credit-card holders willing to spend more because it reminds them that their spending power exceeds the cash they have immediately available. Which of the following, if true, most strongly supports the psychologists' interpretation of the studies?
 - A. The effect noted in the studies is not limited to patrons who have credit cards.
 - B. Patrons who are under financial pressure from their credit-card obligations tend to tip less when presented with a restaurant bill on a tray with credit-card logo than when the tray has no logo.
 - C. In virtually all of the cases in the studies, the patrons who paid bills in cash did not possess credit cards.
 - D. In general, restaurant patrons who pay their bills in cash leave larger tips than do those who pay by credit card.
 - E. The percentage of restaurant bills paid with given brand of credit card increases when that credit card's logo is displayed on the tray with which the bill is prepared.
- 14. **Brochure**: Help conserve our city's water supply. By converting the landscaping in your yard to a water-conserving landscape, you can greatly reduce your outdoor water use. A water-conserving landscape is natural and attractive, and it also saves you money.
 - **Criticism**: For most people with yards, the savings from converting to a water-conserving landscape cannot justify the expense of new landscaping, since typically the conversion would save less than twenty dollars on a homeowner's yearly water bills.

Which of the following, if true, provides the best basis for a rebuttal of the criticism?

- A. Even homeowners whose yards do not have water-conserving landscapes can conserve water by installing water-saving devices in their homes.
- B. A conventional landscape generally requires a much greater expenditure on fertilizer and herbicide than does a water-conserving landscape.
- C. A significant proportion of the residents of the city live in buildings that do not have yards.
- D. It costs no more to put in water-conserving landscaping than it does to put in conventional landscaping.
- E. Some homeowners use more water to maintain their yards than they use for all other purposes combined.

The last members of a now-extinct species of a European wild deer called the giant dear lived in Ireland about 16,000 years ago. Prehistoric cave paintings in France depict this animal as having a large hump on its back. Fossils of this animal, however, do not show any hump. Nevertheless, there is no reason to conclude that the cave paintings are therefore inaccurate in this regard, since _____.

- A. some prehistoric cave paintings in France also depict other animals as having a hump
- B. fossils of the giant deer are much more common in Ireland than in France
- C. animal humps are composed of fatty tissue, which does not fossilize
- D. the cave paintings of the giant deer were painted well before 16,000 years ago
- E. only one currently existing species of deer has any anatomical feature that even remotely resembles a hump
- 16. Shipping Clerk: The five specially ordered shipments sent out last week were sent out on Thursday. Last week, all of the shipments that were sent out on Friday consisted entirely of building supplies, and the shipping department then closed for the weekend. Four shipments were sent to Truax Construction last week, only three of which consisted of building supplies. If the shipping clerk's statements are true, which of the following must also be true?
 - A. At least one of the shipments sent to Truax Construction last week was specially ordered.
 - B. At least one of last week's specially ordered shipments did not consist of building supplies.
 - C. At least one of the shipments sent to Truax Construction was not sent out on Thursday of last week.
 - D. At least one of the shipments that were sent out on Friday of last week was sent to Truax Construction.
 - E. At least one of the shipments sent to Truax Construction last week was sent out before Friday.

- 17. Although most smoking-related illnesses are caused by inhaling the tar in tobacco smoke, it is addiction to nicotine that prevents most smokers from quitting. In an effort to decrease the incidence of smoking-related illnesses, lawmakers in Sandonia plan to reduce the average quantity of nicotine per cigarette by half over the next five years. Unfortunately, smokers who are already addicted to nicotine tend to react to such reductions by smoking correspondingly more cigarettes. The information above most strongly supports which of the following predictions about the effects of implementing the Sandonian government's plan?
 - A. The average quantity of tar inhaled by Sandonian smokers who are currently addicted to nicotine will probably not decrease during the next five years.
 - B. Sandonian smokers who are not already addicted to nicotine will probably also begin to smoke more cigarettes during the next five years than they had previously.
 - C. The annual number of Sandonian smokers developing smoking-related illnesses will probably decrease during the next five years.
 - D. The proportion of Sandonians attempting to quit smoking who succeed in that attempt will probably decrease during the next five years.
 - E. The number of Sandonians who quit smoking during the next five years will probably exceed the number who quit during the last five years.
- 18. **Kate**: The recent decline in numbers of the Tennessee warbler, a North American songbird that migrates each fall to coffee plantations in South America, is due to the elimination of the dense tree cover that formerly was a feature of most South American coffee plantations.

Scott: The population of the spruce budworm, the warbler's favorite prey in North America, has been dropping. This is a more likely explanation of the warbler's decline.

Which of the following, if true, most seriously calls Scott's hypothesis into question?

- A. The numbers of the Baltimore oriole, a songbird that does not eat budworms but is as dependent on South American coffee plantations as is the Tennessee warbler, are declining.
- B. The spruce-budworm population has dropped because of a disease that can infect budworms but not Tennessee warblers.
- C. The drop in the population of the spruce budworm is expected to be only temporary.
- D. Many Tennessee warbler have begun migrating in the fall to places other than traditional coffee plantations.
- E. Although many North American songbirds have declined in numbers, no other species has experienced as great a decline as has the Tennessee warbler.

19. From 1980 to 1989, total consumption of fish in the country of Jurania increased by 4.5 percent, and total consumption of poultry products there increased by 9.0 percent. During the same period, the population of Jurania increased by 6 percent, in part due to immigration to Jurania from other countries in the region.

If the statements above are true, which of the following must also be true on the basis of them?

- A. During the 1980's in Jurania, profits of wholesale distributors of poultry products increased at a greater rate than did profits of wholesale distributors of fish.
- B. For people who immigrated to Jurania during the 1980's, fish was less likely to be a major part of their diet than was poultry.
- C. In 1989 Juranians consumed twice as much poultry as fish.
- D. For a significant proportion of Jurania's population, both fish and poultry products were a regular part of their diet during the 1980's.
- E. Per capita consumption of fish in Jurania was lower in 1989 than in 1980.
- 20. Guidebook writer: I have visited hotels throughout the country and have noticed that in those built before 1930 the quality of the original carpentry work is generally superior to that in hotels built afterward. Clearly carpenters working on hotels before 1930 typically worked with more skill, care, and effort than carpenters who have worked on hotels built subsequently. Which of the following, if true, most seriously weakens the guidebook writer's argument?
 - A. The quality of original carpentry in hotels is generally far superior to the quality of original carpentry in other structures, such as houses and stores.
 - B. Hotels built since 1930 can generally accommodate more guests than those built before 1930.
 - C. The materials available to carpenters working before 1930 were not significantly different in quality from the materials available to carpenters working after 1930.
 - D. The better the quality of original carpentry in a building, the less likely that building is to fall into disuse and be demolished.
 - E. The average length of apprenticeship for carpenters has declined significantly since 1930.

- **21.** When a new restaurant, Martin's Cafe, opened in Riverville last year, many people predicted that business at the Wildflower Inn, Riverville's only other restaurant, would suffer from the competition. Surprisingly, however, in the year since Martin's Cafe opened, the average number of meals per night served at the Wildflower Inn has increased significantly. **Which of the following, if true, most helps to explain the increase?**
 - A. Unlike the Wildflower Inn, Martin's Cafe serves considerably more meals on weekends than it does on weekdays.
 - B. Most of the customers of Martin's Cafe had never dined in Riverville before this restaurant opened, and on most days Martin's Cafe attracts more customers than it can seat.
 - C. The profit per meal is higher, on average, for meals served at Martin's Cafe than for those served at the Wildflower Inn.
 - D. The Wildflower Inn is not open on Sundays, and therefore Riverville residents who choose to dine out on that day must either eat at Martin's Cafe or go to neighboring towns to eat.
 - E. A significant proportion of the staff at Martin's Cafe are people who formerly worked at the Wildflower Inn and were hired away by the owner of Martin's Cafe.
- 22. It is true of both men and women that those who marry as young adults live longer than those who never marry. This does not show that marriage causes people to live longer, since, as compared with other people of the same age, young adults who are about to get married have fewer of the unhealthy habits that can cause a person to have a shorter life, most notably smoking and immoderate drinking of alcohol. Which of the following, if true, most strengthens the argument above?
 - A. Marriage tends to cause people to engage less regularly in sports that involve risk of bodily harm.
 - B. A married person who has an unhealthy habit is more likely to give up that habit than a person with the same habit who is unmarried.
 - C. A person who smokes is much more likely than a nonsmoker to marry a person who smokes at the time of marriage, and the same is true for people who drink alcohol immoderately.
 - D. Among people who marry as young adults, most of those who give up an unhealthy habit after marriage do not resume the habit later in life.
 - E. Among people who as young adults neither drink alcohol immoderately nor smoke, those who never marry live as long as those who marry.

- 23. Lightbox, Inc., owns almost all of the movie theaters in Washington County and has announced plans to double the number of movie screens it has in the county within five years. Yet attendance at Lightbox's theaters is only just large enough for profitability now and the county's population is not expected to increase over the next ten years. Clearly, therefore, if there is indeed no increase in population, Lightbox's new screens are unlikely to prove profitable. Which of the following, if true about Washington County, most seriously weakens the argument?
 - A. Though little change in the size of the population is expected, a pronounced shift toward a younger, more affluent, and more entertainment-oriented population is expected to occur.
 - B. The sales of snacks and drinks in its movie theaters account for more of Lightbox's profits than ticket sales do.
 - C. In selecting the mix of movies shown at its theaters, Lightbox's policy is to avoid those that appeal to only a small segment of the moviegoing population.
 - D. Spending on video purchases, as well as spending on video rentals, is currently no longer increasing.
 - E. There are no population centers in the county that are not already served by at least one of the movie theaters that Lightbox owns and operates.
- 24. Maize contains the vitamin niacin, but not in a form the body can absorb. Pellagra is a disease that results from niacin deficiency. When maize was introduced into southern Europe from the Americas in the eighteenth century, it quickly became a dietary staple, and many Europeans who came to subsist primarily on maize developed pellagra. Pellagra was virtually unknown at that time in the Americas, however, even among people who subsisted primarily on maize. Which of the following, if true, most helps to explain the contrasting incidence of pellagra described above?
 - A. Once introduced into southern Europe, maize became popular with landowners because of its high yields relative to other cereal crops.
 - B. Maize grown in the Americas contained more niacin than maize grown in Europe did.
 - C. Traditional ways of preparing maize in the Americas convert maize's niacin into a nutritionally useful form.
 - D. In southern Europe many of the people who consumed maize also ate niacin-rich foods.
 - E. Before the discovery of pellagra's link with niacin, it was widely believed that the disease was an infection that could be transmitted from person to person.

- 25. Healthy lungs produce a natural antibiotic that protects them from infection by routinely killing harmful bacteria on airway surfaces. People with cystic fibrosis, however, are unable to fight off such bacteria, even though their lungs produce normal amounts of the antibiotic. The fluid on airway surfaces in the lungs of people with cystic fibrosis has an abnormally high salt concentration; accordingly, scientists hypothesize that the high salt concentration is what makes the antibiotic ineffective. Which of the following, if true, most strongly supports the scientists' hypothesis?
 - A. When the salt concentration of the fluid on the airway surfaces of healthy people is raised artificially, the salt concentration soon returns to normal.
 - B. A sample of the antibiotic was capable of killing bacteria in an environment with an unusually low concentration of salt.
 - C. When lung tissue from people with cystic fibrosis is maintained in a solution with a normal salt concentration, the tissue can resist bacteria.
 - D. Many lung infections can be treated by applying synthetic antibiotics to the airway surfaces.
 - E. High salt concentrations have an antibiotic effect in many circumstances.
- **26.** Wind farms, which generate electricity using arrays of thousands of wind-powered turbines, require vast expanses of open land. County X and County Y have similar terrain, but the population density of County X is significantly higher than that of County Y. Therefore, a wind farm proposed for one of the two counties should be built in County Y rather than in County X. **Which of the following, if true, most seriously weakens the planner's argument?**
 - A. County X and County Y are adjacent to each other, and both are located in the windiest area of the state.
 - B. The total population of County Y is substantially greater than that of County X.
 - C. Some of the electricity generated by wind farms in County Y would be purchased by users outside the county.
 - D. Wind farms require more land per unit of electricity generated than does any other type of electrical-generation facility.
 - E. Nearly all of County X's population is concentrated in a small part of the county, while County Y's population is spread evenly throughout the country.

- 27. Over the past five years, the price gap between name-brand cereals and less expensive store-brand cereals has become so wide that consumers have been switching increasingly to store brands despite the name brands' reputation for better quality. To attract these consumers back, several manufacturers of name-brand cereals plan to narrow the price gap between their cereals and store brands to less than what it was five years ago. Which of the following, if true, most seriously calls into question the likelihood that the manufacturers' plan will succeed in attracting back a large percentage of consumers who have switched to store brands?
 - A. There is no significant difference among manufacturers of name-brand cereals in the prices they charge for their products.
 - B. Consumers who have switched to store-brand cereals have generally been satisfied with the quality of those cereals.
 - C. Many consumers would never think of switching to store-brand cereals because they believe the name brand cereals to be of better quality.
 - D. Because of lower advertising costs, stores are able to offer their own brands of cereals at significantly lower prices than those charged for name-brand cereals.
 - E. Total annual sales of cereals—including both name-brand and store-brand cereals—have not increased significantly over the past five years.

The irradiation of food kills bacteria and thus retards spoilage. However, it also lowers the nutritional value of many foods. For example, irradiation destroys a significant percentage of whatever vitamin B1 a food may contain. Proponents of irradiation point out that irradiation is no worse in this respect than cooking. However, this fact is either beside the point, since much irradiated food is eaten raw, or else misleading, since ______.

- A. many of the proponents of irradiation are food distributors who gain from food's having a longer shelf life
- B. it is clear that killing bacteria that may be present on food is not the only effect that irradiation has
- C. cooking is usually the final step in preparing food for consumption, whereas irradiation serves to ensure a longer shelf life for perishable foods
- D. certain kinds of cooking are, in fact, even more destructive of vitamin B1 than carefully controlled irradiation is
- E. for food that is both irradiated and cooked, the reduction of vitamin B1 associated with either process individually is compounded

Although the pesticide TDX has been widely used by fruit growers since the early 1960's, a regulation in force since 1960 has prohibited sale of fruit on which any TDX residue can be detected. That regulation is about to be replaced by one that allows sale of fruit on which trace amounts of TDX residue are detected. In fact, however, the change will not allow more TDX on fruit than was allowed in the 1960's, because _____.

- A. pre-1970 techniques for detecting TDX residue could detect it only when it was present on fruit in more than the trace amounts allowed by the new regulations
- B. many more people today than in the 1960's habitually purchase and eat fruit without making an effort to clean residues off the fruit
- C. people today do not individually consume any more pieces of fruit, on average, than did the people in the 1960's
- D. at least a small fraction of the fruit sold each year since the early 1960's has had on it greater levels of TDX than the regulation allows
- E. the presence of TDX on fruit in greater than trace amounts has not been shown to cause any harm even to children who eat large amounts of fruit
- **30.** Wolves generally avoid human settlements. For this reason, domestic sheep, though essentially easy prey for wolves, are not usually attacked by them. In Hylantia prior to 1910, farmers nevertheless lost considerable numbers of sheep to wolves each year. Attributing this to the large number for wolves, in 1910 the government began offering rewards to hunters for killing wolves. From 1910 to 1915, large numbers of wolves were killed. Yet wolf attacks on sheep increased significantly. **Which of the following, if true, most helps to explain the increase in wolf attacks on sheep?**
 - A. Populations of deer and other wild animals that wolves typically prey on increased significantly in numbers from 1910 to 1915.
 - B. Prior to 1910, there were no legal restrictions in Hylantia on the hunting of wolves.
 - C. After 1910 hunters shot and wounded a substantial number of wolves, thereby greatly diminishing these wolves' ability to prey on wild animals.
 - D. Domestic sheep are significantly less able than most wild animals to defend themselves against wolf attacks.
 - E. The systematic hunting of wolves encouraged by the program drove many wolves in Hylantia to migrate to remote mountain areas uninhabited by humans.

- 31. Nitrogen dioxide is a pollutant emitted by automobiles. Catalytic converters, devices designed to reduce nitrogen dioxide emissions, have been required in all new cars in Donia since 1993, and as a result, nitrogen dioxide emissions have been significantly reduced throughout most of the country. Yet although the proportion of new cars in Donia's capital city has always been comparatively high, nitrogen dioxide emissions there have showed only an insignificant decline since 1993. Which of the following, if true, most helps to explain the insignificant decline in nitrogen dioxide emissions in Donia's capital city?
 - A. More of the cars in Donia's capital city were made before 1993 than after 1993.
 - B. The number of new cars sold per year in Donia has declined slightly since 1993.
 - C. Pollutants other than nitrogen dioxide that are emitted by automobiles have also been significantly reduced in Donia since 1993.
 - D. Many Donians who own cars made before 1993 have had catalytic converters installed in their cars.
 - E. Most car trips in Donia's capital city are too short for the catalytic converter to reach its effective working temperature.
- **32.** Capuchin monkeys often rub their bodies with a certain type of millipede. Laboratory tests show that secretions from the bodies of these millipedes are rich in two chemicals that are potent mosquito repellents, and mosquitoes carry parasites that debilitate capuchins. Some scientists hypothesize that the monkeys rub their bodies with the millipedes because doing so helps protect them from mosquitoes. **Which of the following, if true, provides the most support for the scientists' hypothesis?**
 - A. A single millipede often gets passed around among several capuchins, all of whom rub their bodies with it.
 - B. The two chemicals that repel mosquitoes also repel several other varieties of insects.
 - C. The capuchins rarely rub their bodies with the millipedes except during the rainy season, when mosquito populations are at their peak.
 - D. Although the capuchins eat several species of insects, they do not eat the type of millipede they use to rub their bodies.
 - E. The two insect-repelling chemicals in the secretions of the millipedes are carcinogenic for humans but do not appear to be carcinogenic for capuchins.

- **33.** Five years ago, as part of a plan to encourage citizens of Levaska to increase the amount of money they put into savings, Levaska's government introduced special savings accounts in which up to \$3,000 a year can be saved with no tax due on the interest unless money is withdrawn before the account holder reaches the age of sixty-five. Millions of dollars have accumulated in the special accounts, so the government's plan is obviously working. **Which of the following, if true, most seriously weakens the argument?**
 - A. A substantial number of Levaskans have withdrawn at least some of the money they had invested in the special accounts.
 - B. Workers in Levaska who already save money in long-term tax-free accounts that are offered through their workplace cannot take advantage of the special savings accounts introduced by the government.
 - C. The rate at which interest earned on money deposited in regular savings accounts is taxed depends on the income bracket of the account holder.
 - D. Many Levaskans who already had long-term savings have steadily been transferring those savings into the special accounts.
 - E. Many of the economists who now claim that the government's plan has been successful criticized it when it was introduced.
- **34.** An overwhelming proportion of the most productive employees at SaleCo's regional offices work not eight hours a day, five days a week, as do other SaleCo employees, but rather ten hours a day, four days a week, with Friday off. Noting this phenomenon, SaleCo's president plans to increase overall productivity by keeping the offices closed on Fridays and having all employees work the same schedule—ten hours a day, four days a week. **Which of the following, if true, provides the most reason to doubt that the president's plan, if implemented, will achieve its stated purpose?**
 - A. Typically, a SaleCo employee's least productive hours in the workplace are the early afternoon hours.
 - B. None of the employees who work four days a week had volunteered to work that schedule, but all were assigned to it by their supervisors.
 - C. Working ten hours a day has allowed the most productive employees to work two hours alone each day in their respective offices relatively undisturbed by fellow employees.
 - D. Employees at SaleCo are compensated not on the basis of how many hours a week they work but on the basis of how productive they are during the hours they are at work.
 - E. Those SaleCo employees who have a four-day workweek do not take any of their office work to do at home on Fridays.

According to promotional material published by the city of Springfield, more tourists stay in hotels in Springfield than stay in the neighboring city of Harristown. A brochure from the largest hotel in Harristown claims that more tourists stay in that hotel than stay in the Royal Arms Hotel in Springfield. If both of these sources are accurate, however, the county's "Report on Tourism" must be in error in indicating that ______.

- A. more tourists stay in hotel accommodations in Harristown than stay in the Royal Arms Hotel
- B. the Royal Arms Hotel is the only hotel in Springfield
- C. there are several hotels in Harristown that are larger than the Royal Arms Hotel
- D. some of the tourists who have stayed in hotels in Harristown have also stayed in the Royal Arms Hotel
- E. some hotels in Harristown have fewer tourist guests each year than the Royal Arms Hotel has
- 36. **Proposal**: Carbon dioxide and methane in the atmosphere block the escape of heat into space. So emission of these "greenhouse" gases contributes to global warming. In order to reduce global warming, emission of greenhouse gases needs to be reduced. Therefore, the methane now emitted from open landfills should instead be burned to produce electricity. **Objection**: The burning of methane generates carbon dioxide that is released into the atmosphere.

Which of the following, if true, most adequately counters the objection made to the proposal?

- A. Every time a human being or other mammal exhales, there is some carbon dioxide released into the air.
- B. The conversion of methane to electricity would occur at a considerable distance from the landfills.
- C. The methane that is used to generate electricity would generally be used as a substitute for a fuel that does not produce any greenhouse gases when burned.
- D. Methane in the atmosphere is more effective in blocking the escape of heat from the Earth than is carbon dioxide.
- E. The amount of methane emitted from the landfills could be reduced if the materials whose decomposition produces methane were not discarded, but recycled.

- **37.** Crowding on Mooreville's subway frequently leads to delays, because it is difficult for passengers to exit from the trains. Subway ridership is projected to increase by 20 percent over the next 10 years. The Metroville Transit Authority plans to increase the number of daily train trips by only 5 percent over the same period. Officials predict that this increase is sufficient to ensure that the incidence of delays due to crowding does not increase. **Which of the following, if true, provides the strongest grounds for the officials' prediction?**
 - A. By changing maintenance schedules, the Transit Authority can achieve the 5 percent increase in train trips without purchasing any new subway cars.
 - B. The Transit Authority also plans a 5 percent increase in the number of bus trips on routes that connect to subways.
 - C. For most commuters who use the subway system, there is no practical alternative public transportation available.
 - D. Most of the projected increase in ridership is expected to occur in off-peak hours when trains are now sparsely used.
 - E. The 5 percent increase in the number of train trips can be achieved without an equal increase in Transit Authority operational costs.
- 38. Certain politicians in the country of Birangi argue that a 50 percent tax on new automobiles would halt the rapid increase of automobiles on Birangi's roads and thereby slow the deterioration of Birangi's air quality. Although most experts agree that such a tax would result in fewer Birangians buying new vehicles and gradually reduce the number of automobiles on Birangi's roads, they contend that it would have little impact on Birangi's air-quality problem. Which of the following, if true in Birangi, would most strongly support the experts' contention about the effect of the proposed automobile tax on Birangi's air-quality problem?
 - A. Automobile emissions are the largest single source of air pollution.
 - B. Some of the proceeds from the new tax would go toward expanding the nonpolluting commuter rail system.
 - C. Currently, the sales tax on new automobiles is considerably lower than 50 percent.
 - D. Automobiles become less fuel efficient and therefore contribute more to air pollution as they age.
 - E. The scrapping of automobiles causes insignificant amounts of air pollution.

- **39.** Of patients over 65 years old who survived coronary bypass surgery—a procedure widely prescribed for people with heart disease—only 75 percent benefited from the surgery. Thus it appears that for one in four such patients, the doctors who advised them to undergo this surgery, with its attendant risks and expense, were more interested in an opportunity to practice their skills and in their fee than in helping the patient. **Which of the following, if true, most seriously undermines the argument?**
 - A. Many of the patients who receive coronary bypass surgery are less than 55 years old.
 - B. Possible benefits of coronary bypass surgery include both relief from troubling symptoms and prolongation of life.
 - C. Most of the patients in the survey decided to undergo coronary bypass surgery because they were advised that the surgery would reduce their risk of future heart attacks.
 - D. The patients over 65 years old who did not benefit from the coronary bypass surgery were as fully informed as those who did benefit from the surgery as to the risks of the surgery prior to undergoing it.
 - E. The patients who underwent coronary bypass surgery but who did not benefit from it were medically indistinguishable, prior to their surgery, from the patients who did benefit.
- **40.** Printwell's Ink Jet Division manufactures ink-jet printers and the ink cartridges they use. Sales of its ink-jet printers have increased. Monthly revenues from those sales, however, have not increased, because competition has forced Printwell to cut the prices of its printers. Unfortunately, Printwell has been unable to bring down the cost of manufacturing a printer. Thus, despite the increase in printer sales, the Ink Jet Division must be providing the company with much smaller than it used to. **Which of the following, if true, most seriously weakens the argument?**
 - A. Ink-jet printers in regular use frequently need new ink cartridges, and Printwell's printers only accept Printwell's ink cartridges.
 - B. Unlike some competing companies, Printwell sells all of its printers through retailers, and these retailers' costs account for a sizable proportion of the printers' ultimate retail price.
 - C. Some printer manufacturers have been forced to reduce the sale price of their ink-jet printers even more than Printwell has.
 - D. In the past year, no competing manufacturer of ink-jet printers has had as great an increase in unit sales of printers as Printwell has.
 - E. In the past year, sales of Printwell's ink-jet printers have increased more than sales of any other type of printer made by Printwell.

- **41.** Escalating worldwide demand for corn has led to a sharp increase in the market price of corn, and corn prices are likely to remain high. Corn is extensively used as feed for livestock, and because profit margins are tight in the livestock business, many farmers are expected to leave the business. With fewer suppliers, meat prices will surely rise. Nonetheless, observers expect an immediate short-term decrease in meat prices. **Which of the following, if true, most helps to justify the observers' expectation?**
 - A. The increase in corn prices is due more to a decline in the supply of corn than to a growth in demand for it.
 - B. Generally, farmers who are squeezed out of the livestock business send their livestock to market much earlier than they otherwise would.
 - C. Some people who ate meat regularly in the past are converting to diets that include little or no meat.
 - D. As meat prices rise, the number of livestock producers is likely to rise again.
 - E. Livestock producers who stay in the business will start using feed other than corn more extensively than they did in the past.
- **42.** In the late 1980's, the population of sea otters in the North Pacific Ocean began to decline. Of the two plausible explanations for the decline—increased predation by killer whales or disease—disease is the more likely. After all, a concurrent sharp decline in the populations of seals and sea lions was almost certainly caused by a pollution-related disease, which could have spread to sea otters, whereas the population of killer whales did not change noticeably. **Which of the following, if true, most seriously weakens the reasoning?**
 - A. Killer whales in the North Pacific usually prey on seals and sea lions but will, when this food source is scarce, seek out other prey.
 - B. There is no indication that substantial numbers of sea otters migrated to other locations from the North Pacific in the 1980's.
 - C. Along the Pacific coast of North America in the 1980's, sea otters were absent from many locations where they had been relatively common in former times.
 - D. Following the decline in the population of the sea otters, there was an increase in the population of sea urchins, which are sea otters' main food source.
 - E. The North Pacific populations of seals and sea lions cover a wider geographic area than does the population of sea otters.

- **43.** In order to withstand tidal currents, juvenile horseshoe crabs frequently burrow in the sand. Such burrowing discourages barnacles from clinging to their shells. When fully grown, however, the crabs can readily withstand tidal currents without burrowing, and thus they acquire substantial populations of barnacles. Surprisingly, in areas where tidal currents are very weak, juvenile horseshoe crabs are found not to have significant barnacle populations, even though they seldom burrow. **Which of the following, if true, most helps to explain the surprising finding?**
 - A. Tidal currents do not themselves dislodge barnacles from the shells of horseshoe crabs.
 - B. Barnacles most readily attach themselves to horseshoe crabs in areas where tidal currents are weakest.
 - C. The strength of the tidal currents in a given location varies widely over the course of a day.
 - D. A very large barnacle population can significantly decrease the ability of a horseshoe crab to find food.
 - E. Until they are fully grown, horseshoe crabs shed their shells and grow new ones several times a year.
- **44.** From 1973 to 1976, total United States consumption of cigarettes increased 3.4 percent, and total sales of chewing tobacco rose 18.0 percent. During the same period, total United States population increased 5.0 percent. **If the statements above are true, which of the following conclusions can be properly drawn?**
 - A. United States manufacturers of tobacco products had higher profits in 1976 than in 1973.
 - B. Per capita consumption of cigarettes in the United States was lower in 1976 than in 1973.
 - C. The proportion of nonsmokers in the United States population dropped slightly between 1973 and 1976.
 - D. United States manufacturers of tobacco products realize a lower profit on cigarettes than on chewing tobacco.
 - E. A large percentage of United States smokers switched from cigarettes to chewing tobacco between 1973 and 1976.

- **45.** Many large department stores in Montalia now provide shopping carts for their customers. Since customers using shopping carts tend to buy more than those without shopping carts, most of these stores are experiencing strong sales growth, while most other department stores are not. Therefore, in order to boost sales, managers of Jerrod's, Montalia's premier department store, are planning to purchase shopping carts and make them available to the store's customers next month. **Which of the following, if true, casts most doubt whether the managers' plan, if implemented, will achieve its goal?**
 - A. Since most customers associate shopping carts with low-quality discount stores, Jerrod's high-quality image would likely suffer if shopping carts were introduced.
 - B. Because the unemployment rate has declined to very low levels, Jerrod's now has to pay significantly higher wages in order to retain its staff.
 - C. A number of department stores that did not make shopping carts available to their customers have had to close recently due to falling profits.
 - D. Shopping carts are not very expensive, but they generally need to be replaced every few years.
 - E. Stores that make shopping carts available to their customers usually have to hire people to retrieve the carts from parking areas.
- **46.** A mosquito bite can transmit to a person the parasite that causes malaria, and the use of mosquito nets over children's beds can significantly reduce the incidence of malarial infection for children in areas where malaria is common. Yet public health officials are reluctant to recommend the use of mosquito nets over children's beds in such areas. **Which of the following, if true, would provide the strongest grounds for the public health officials' reluctance?**
 - A. Early exposure to malaria increases the body's resistance to it and results in a lesser likelihood of severe life-threatening episodes of malaria.
 - B. Mosquito bites can transmit to people diseases other than malaria.
 - C. Mosquito nets provide protection from some insect pests other than mosquitoes.
 - D. Although there are vaccines available for many childhood diseases, no vaccine has been developed that is effective against malaria.
 - E. The pesticides that are most effective against mosquitoes in regions where malaria is common have significant detrimental effects on human health.

- 47. The Eurasian ruffe, a fish species inadvertently introduced into North America's Great Lakes in recent years, feeds on the eggs of lake whitefish, a native species, thus threatening the lakes' natural ecosystem. To help track the ruffe's spread, government agencies have produced wallet-sized cards about the ruffe. The cards contain pictures of the ruffe and explain the danger they pose; the cards also request anglers to report any ruffe they catch. Which of the following, if true, would provide most support for the prediction that the agencies' action will have its intended effect?
 - A. The ruffe has spiny fins that make it unattractive as prey.
 - B. Ruffe generally feed at night, but most recreational fishing on the Great Lakes is done during daytime hours.
 - C. Most people who fish recreationally on the Great Lakes are interested in the preservation of the lake whitefish because it is a highly prized game fish.
 - D. The ruffe is one of several nonnative species in the Great Lakes whose existence threatens the survival of lake whitefish populations there.
 - E. The bait that most people use when fishing for whitefish on the Great Lakes is not attractive to ruffe.
- **48.** A diet high in saturated fats increases a person's risk of developing heart disease. Regular consumption of red wine reduces that risk. Per-capita consumption of saturated fats is currently about the same in France as in the United States, but there is less heart disease there than in the United States because consumption of red wine is higher in France. The difference in regular red-wine consumption has been narrowing, but no similar convergence in heart-disease rates has occurred. **Which of the following, if true, most helps to account for the lack of convergence noted above?**
 - A. Consumption of saturated fats is related more strongly to the growth of fatty deposits on artery walls, which reduce blood flow to the heart, than it is to heart disease directly.
 - B. Over the past 30 years, per-capita consumption of saturated fats has remained essentially unchanged in the United States but has increased somewhat in France.
 - C. Reports of the health benefits of red wine have led many people in the United States to drink red wine regularly.
 - D. Cigarette smoking, which can also contribute to heart disease, is only slightly more common in France than in the United States.
 - E. Regular consumption of red wine is declining dramatically among young adults in France, and heart disease typically does not manifest itself until middle age.

Either food scarcity or excessive hunting can threaten a population of animals. If the group faces food scarcity, individuals in the group will reach reproductive maturity later than otherwise. If the group faces excessive hunting, individuals that reach reproductive maturity earlier will come to predominate. Therefore, it should be possible to determine whether prehistoric mastodons became extinct because of food scarcity or human hunting, since there are fossilized mastodon remains from both before and after mastodon populations declined, and ______.

- A. there are more fossilized mastodon remains from the period before mastodon populations began to decline than from after that period
- B. the average age at which mastodons from a given period reached reproductive maturity can be established from their fossilized remains
- C. it can be accurately estimated from fossilized remains when mastodons became extinct
- D. it is not known when humans first began hunting mastodons
- E. climate changes may have gradually reduced the food available to mastodons
- 50. Editorial in Krenlandian Newspaper: Krenland's steelmakers are losing domestic sales because of lower-priced imports, in many cases because foreign governments subsidize their steel industries in ways that are banned by international treaties. But whatever the cause, the cost is ultimately going to be jobs in Krenland's steel industry. Therefore, it would protect not only steel companies but also industrial employment in Krenland if our government took measures to reduce cheap steel imports. Which of the following, if true, most seriously weakens the editorial's argument?
 - A. Because steel from Krenland is rarely competitive in international markets, only a very small portion of Krenlandian steelmakers' revenue comes from exports.
 - B. The international treaties that some governments are violating by giving subsidies to steelmakers do not specify any penalties for such violations.
 - C. For many Krenlandian manufacturers who face severe international competition in both domestic and export markets, steel constitutes a significant part of their raw material costs.
 - D. Because of advances in order-taking, shipping, and inventory systems, the cost of shipping steel from foreign producers to Krenland has fallen considerably in recent years.
 - E. Wages paid to workers in the steel industry in Krenland differ significantly from wages paid to workers in many of the countries that export steel to Krenland.

- **51.** Researchers took a group of teenagers who had never smoked and for one year tracked whether they took up smoking and how their mental health changed. Those who began smoking within a month of the study's start were four times as likely to be depressed at the study's end than those who did not begin smoking. Since nicotine in cigarettes changes brain chemistry, perhaps thereby affecting mood, it is likely that smoking contributes to depression in teenagers. **Which of the following, if true, most strengthens the argument?**
 - A. Participants who were depressed at the study's start were no more likely to be smokers at the study's end than those who were not depressed.
 - B. Participants who began smoking within a month of the study's start were no more likely than those who began midway through to have quit smoking by the study's end.
 - C. Few, if any, of the participants in the study were friends or relatives of other participants.
 - D. Some participants entered and emerged from a period of depression within the year of the study.
 - E. The researchers did not track use of alcohol by the teenagers.
- 52. In January of last year the Moviemania chain of movie theaters started popping its popcorn in canola oil, instead of the less healthful coconut oil that it had been using until then. Now Moviemania is planning to switch back, saying that the change has hurt popcorn sales. That claim is false, however, since according to Moviemania's own sales figures, Moviemania sold 5 percent more popcorn last year than in the previous year. Which of the following, if true, most strongly supports the argument against Moviemania's claim?
 - A. Total sales of all refreshments at Moviemania's movie theaters increased by less than 5 percent last year.
 - B. Moviemania makes more money on food and beverages sold at its theaters than it does on sales of movie tickets.
 - C. Moviemania's customers prefer the taste of popcorn popped in coconut oil to that of popcorn popped in canola oil.
 - D. Total attendance at Moviemania's movie theaters was more than 20 percent higher last year than the year before.
 - E. The year before last, Moviemania experienced a 10 percent increase in popcorn sales over the previous year.

- **53.** Although exposure to asbestos is the primary cause of mesothelioma, a slow-developing cancer, researchers believe that infection by the SV40 virus is a contributing cause, since in the United States 60 percent of tissue samples from mesotheliomas, but none from healthy tissue, contain SV40. SV40 is a monkey virus; however, in 1960 some polio vaccine was contaminated with the virus. Researchers hypothesize that this vaccine was the source of the virus found in mesotheliomas decades later. **Which of the following, if true, most strongly supports the researchers' hypothesis?**
 - A. SV40 is widely used as a research tool in cancer laboratories.
 - B. Changes in the technique of manufacturing the vaccine now prevent contamination with SV40.
 - C. Recently discovered samples of the vaccine dating from 1960 still show traces of the virus.
 - D. In a small percentage of cases of mesothelioma, there is no history of exposure to asbestos.
 - E. In Finland, where the polio vaccine was never contaminated, samples from mesotheliomas do not contain SV40.

54. Which of the following most logically completes the argument below?

Although the number of large artificial satellites orbiting the Earth is small compared to the number of small pieces of debris in orbit, the large satellites interfere more seriously with telescope observations because of the strong reflections they produce. Because many of those large satellites have ceased to function, the proposal has recently been made to eliminate interference from nonfunctioning satellites by exploding them in space. This proposal, however, is ill conceived, since ______.

- A. many nonfunctioning satellites remain in orbit for years
- B. for satellites that have ceased to function, repairing them while they are in orbit would be prohibitively expensive
- C. there are no known previous instances of satellites' having been exploded on purpose
- D. the only way to make telescope observations without any interference from debris in orbit is to use telescopes launched into extremely high orbits around the Earth
- E. a greatly increased number of small particles in Earth's orbit would result in a blanket of reflections that would make certain valuable telescope observations impossible

A certain tropical island received food donations in the form of powdered milk for distribution to its poorest residents, who were thought to be malnourished. Subsequently, the rate of liver cancers among those islanders increased sharply. The donated milk was probably to blame: recent laboratory research on rats has shown that rats briefly exposed to the substances aflatoxin tend to develop liver cancer when fed casein, a milk protein. This result is relevant because _____.

- A. in the tropics, peanuts, a staple of these island residents, support a mold growth that produces aflatoxin
- B. the liver is more sensitive to carcinogens, of which aflatoxin may be one, than most other bodily organs
- C. casein is not the only protein contained in milk
- D. powdered milk is the most appropriate form in which to send milk to a tropical destination
- E. the people who were given the donated milk had been screened for their ability to digest milk
- **56.** Insect infestations in certain cotton-growing regions of the world have caused dramatic increases in the price of cotton on the world market. By contrast, the price of soybeans has long remained stable. Knowing that cotton plants mature quickly, many soybean growers in Ortovia plan to cease growing soybeans and begin raising cotton instead, thereby taking advantage of the high price of cotton to increase their income significantly, at least over the next several years. **Which of the following, if true, most seriously weakens the plan's chances for success?**
 - A. The cost of raising soybeans has increased significantly over the past several years and is expected to continue to climb.
 - B. Tests of a newly developed, inexpensive pesticide have shown it to be both environmentally safe and effective against the insects that have infested cotton crops.
 - C. In the past several years, there has been no sharp increase in the demand for cotton and for goods made out of cotton.
 - D. Few consumers would be willing to pay significantly higher prices for cotton goods than they are now paying.
 - E. The species of insect that has infested cotton plants has never been known to attack soybean plants.

- **57.** A sudden increase in the production of elephant ivory artifacts on the Mediterranean coast of North Africa occurred in the tenth century. Historians explain this increase as the result of an area opening up as a new source of ivory and argue on this basis that the important medieval trade between North Africa and East Africa began at this period. **Each of following, if true, provides some support for the historians' account described above EXCEPT:**
 - A. In East Africa gold coins from Mediterranean North Africa have been found at a tenth-century site but at no earlier sites.
 - B. The many surviving letters of pre-tenth-century North African merchants include no mention of business transactions involving East Africa.
 - C. Excavations in East Africa reveal a tenth-century change in architectural style to reflect North African patterns.
 - D. Documents from Mediterranean Europe and North Africa that date back earlier than the tenth century show knowledge of East African animals.
 - E. East African carvings in a style characteristic of the tenth century depict seagoing vessels very different from those used by local sailors but of a type common in the Mediterranean.
- **58.** The percentage of households with an annual income of more than \$40,000 is higher in Merton County than in any other county. However, the percentage of households with an annual income of \$60,000 or more is highest in Sommer county. **If the statements above are true, which of the following can properly be concluded on the basis of them?**
 - A. No household in Merton county has an annual income of \$60,000 or more.
 - B. Some households in Merton county have an annual income between \$40,000 and \$60,000.
 - C. The number of households with an annual income of more than \$40,000 is greater in Merton than in Sommer county.
 - D. Average annual household income is higher in Sommer than in Merton county.
 - E. The percentage of households with an annual income of \$80,000 is higher in Sommer than in Merton county.

- **59.** People with a certain eye disorder are virtually unable to see in moderately bright light, which seems to them unbearably intense, since the cells of their retinas are overwhelmed by moderately bright light. These people do, however, show normal sensitivity to most components of dim light. Their retinal cells are also not excessively sensitive to red components of moderately bright light. **The information above best supports which of the following hypotheses about people with the disorder described, if they have no other serious visual problems?**
 - A. In all moderately dim light in which people without the disorder can read large print, people with the disorder cannot read such print.
 - B. In an otherwise darkened concert hall, these people will see a dimly illuminated red exit sign more clearly than small dim white lights that mark the aisles.
 - C. These people typically see more acutely at night and in dim light than do most people who do not have the disorder.
 - D. Eyeglasses that are transparent to red components of light but filter out other components of light help these people see in moderately bright light.
 - E. These people perceive colors other than red in the same way as do most people who do not have the disorder.
- On. Unprecedented industrial growth in the country of Remo has created serious environmental problems because factories there lack adequate pollution-control systems. Remo is developing a clean growth plan that includes environmental regulations that will require the installation of such systems. Since no companies in Remo currently produce pollution-control systems, the plan, if implemented, will create significant opportunities for foreign exporters to market pollution-control systems. Which of the following, if true, most seriously weakens the argument?
 - A. The clean growth plan will provide tax incentives for local businesses to develop and manufacture pollution-control devices.
 - B. Foreign exporters would provide factory-trained technicians to maintain the pollution-control systems sold to Remo.
 - C. Industrial lobbyists sponsored by local businesses in Remo are trying to prevent the implementation of the government regulations.
 - D. The regulations that Remo plans to implement are much less strict than those in neighboring nations.
 - E. Pollution in Remo has caused serious health problems for workers, contributing to a significant increase in the number of workdays lost to illness.

- **61.** Charcoal from a hearth site in Colorado, 2,000 miles south of Alaska, is known to be 11,200 years old. Researchers reasoned that, since glaciers prevented human migration south from the Alaska-Siberia land bridge between 18,000 and 11,000 years ago, humans must have come to the Americas more than 18,000 years ago. **Which of the following pieces of new evidence would cast doubt on the conclusion drawn above?**
 - A. Using new radiocarbon dating techniques, it was determined that the charcoal from the Colorado site was at least 11,400 years old.
 - B. Another campsite was found in New Mexico with remains dated at 16,000 years old.
 - C. A computer simulation of glacial activity showed that it would already have been impossible for humans to travel south overland from Alaska 18,500 years ago.
 - D. Using new radiocarbon dating techniques, it was proved that an ice-free corridor allowed passage south from the Alaska-Siberia land bridge at least 11,400 years ago.
 - E. Studies of various other hunting-gathering populations showed convincingly that, once the glaciers allowed passage, humans could have migrated from Alaska to Colorado in about 20 years.
- **62.** Scientists are discussing ways to remove excess carbon dioxide from the atmosphere by increasing the amount that is absorbed by plant life. One plan to accomplish this is to establish giant floating seaweed farms in the oceans. When the seaweed plants die, they will be disposed of by being burned for fuel. **Which of the following, if true, would indicate the most serious weakness in the plan above?**
 - A. Some areas of ocean in the Southern Hemisphere do not contain sufficient nutrients to support large seaweed farms.
 - B. When a seaweed plant is burned, it releases an amount of carbon dioxide comparable to the amount it has absorbed in its lifetime.
 - C. Even if seaweed farms prove effective, some people will be reluctant to switch to this new fuel.
 - D. Each year about seven billion tons of carbon dioxide are released into the atmosphere but only about five billion tons are absorbed by plant life.
 - E. Seaweed farms would make more money by farming seaweed to sell as nutritional supplements than by farming seaweed to sell as fuel.

- **63.** In general, jobs are harder to get in times of economic recession because many businesses cut back operations. However, any future recessions in Vargonia will probably not reduce the availability of teaching jobs at government-funded schools. This is because Vargonia has just introduced a legal requirement that education in government-funded schools be available, free of charge, to all Vargonian children regardless of the state of the economy, and that current student-teacher ratios not be exceeded. **Which of the following, if true, most strengthens the argument?**
 - A. The current student-teacher ratio at Vargonia's government-funded schools is higher than it was during the most recent period of economic recession.
 - B. During recent periods when the Vargonian economy has been strong, almost 25 percent of Vargonian children have attended privately funded schools, many of which charge substantial fees.
 - C. Nearly 20 percent more teachers are currently employed in Vargonia's government-funded schools than had been employed in those schools in the period before the last economic recession.
 - D. Teachers in Vargonia's government-funded schools are well paid relative to teachers in most privately funded schools in Vargonia, many of which rely heavily on part-time teachers.
 - E. During the last economic recession in Vargonia, the government permanently closed a number of the schools that it had funded.
- **64.** FastMart, a convenience store chain, is planning to add pancake syrup to the items it sells. FastMart stores do not have shelf space to stock more than one variety of syrup. Surveys of FastMart customers indicate that one-fourth of them prefer low-calorie syrup, while three-fourths prefer regular syrup. Since FastMart's highest priority is to maximize sales, the obvious strategy for it is to stock regular syrup. **Which of the following, if true, most seriously weakens the argument?**
 - A. People buying pancake syrup at convenience stores, unlike those buying it at supermarkets, generally buy it only a few times.
 - B. People who prefer low-calorie syrup generally use about the same amount of syrup on their pancakes as those who prefer regular syrup.
 - C. Regular syrup does not sell for a higher price per unit than low-calorie syrup.
 - D. In general, customers who prefer regular syrup will buy low-calorie syrup if regular is unavailable, but those who prefer low-calorie will not buy regular syrup.
 - E. Sales of syrup are not expected to account for a large proportion of total dollar sales at the average FastMart store.

- **65.** Certain genetically modified strains of maize produce a natural insecticide that protects against maize-eating insects. The insecticide occurs throughout the plant, including its pollen. Maize pollen is dispersed by the wind and often blows onto milkweed plants that grow near maize fields. Caterpillars of monarch butterflies feed exclusively on milkweed leaves. When, in experiments, these caterpillars were fed milkweed leaves dusted with pollen from modified maize plants, they died. Therefore, use of the modified maize inadvertently imperils monarch butterflies. **Which of the following, if true, most seriously weakens the argument?**
 - A. Per unit of volume, the natural insecticide produced by the genetically modified maize plants is less toxic to insects than are many commercial insecticides commonly used on maize plants.
 - B. Standard weed-control practices that have been used by farmers for decades have largely eliminated milkweed plants from certain areas where monarch-butterfly caterpillars were once common.
 - C. The experiments showed that the caterpillars were not harmed by contact with the pollen from the genetically modified plants unless they ingested it.
 - D. The maize-eating insects that the natural insecticide protects against do not feed on the pollen of the maize plant.
 - E. Airborne maize pollen tends to collect on the middle leaves of milkweed plants and monarch caterpillars feed only on the plant's tender upper leaves.
- 66. Denoma, a major consumer-electronics maker, had a sizeable decline in sales revenue for its most recent fiscal year. This result appears surprising, because electronics retailers report that although their overall sales were considerably lower than in the previous year, their sales revenue from Denoma models actually grew, largely thanks to some innovative and popular models that Denoma introduced. Which of the following, if true, does most to explain the apparently surprising result?
 - A. Because of the need to educate the public about its new models' capabilities, Denoma's advertising spending was higher than normal over the period.
 - B. For the period at issue, Denoma's major competitors reported declines in revenue that were, in percentage terms, greater than Denoma's.
 - C. A significant proportion of Denoma's revenue comes from making components for other consumer-electronics manufacturers.
 - D. Unlike some of its major competitors, Denoma has no lines of business outside consumer electronics to provide revenue when retail sales of consumer electronics are weak.
 - E. During the period, consumer-electronics retailers sold remaining units of Denoma's superseded models at prices that were deeply discounted from those models' original prices.

- **67.** Outbreaks of Rift Valley fever occur irregularly in East Africa, several years apart. When outbreaks do occur, they kill thousands of cattle. A livestock vaccine against the disease exists but is rarely used. It is too expensive for farmers to use routinely, and since it is not effective until a month after vaccination, administering it after an outbreak begins helps very little. Nevertheless, experts predict that use of the vaccine will increase significantly within the next few years. **Which of the following, if true, provides the strongest justification for the experts' prediction?**
 - A. Rift Valley fever is spread by mosquitoes, but each outbreak is so widespread that it is impractical to control it by using insecticides.
 - B. When an outbreak of Rift Valley fever occurs, unaffected countries often refuse to import livestock from the countries affected by the outbreak.
 - C. It would take less than a month for producers of the vaccine to adjust their production operations to cope with a large increase in demand.
 - D. Many cattle farmers in East Africa are nomadic or live in remote villages, and such farmers, who have little access to modern veterinary medicine, are particularly hard hit by outbreaks of Rift Valley fever.
 - E. Recently published research has shown that certain identifiable climatic conditions are almost invariably followed, within two to five months, by an outbreak of Rift Valley fever.

Researchers recently asked dozens of shoppers, chosen at random coming out of a FoodBasket supermarket, what they had purchased. The prices of the very same items at the nearest ShopperKing supermarket were totaled and compared with the FoodBasket total. The ShopperKing totals averaged five percent higher than the FoodBasket totals. Nevertheless, this result does not necessarily show that shoppers at ShopperKing would save money overall by shopping at FoodBasket instead, since ______.

- A. shoppers who shop regularly at a given supermarket generally choose that store for the low prices offered on the items that they purchase most often
- B. for shoppers with more than 20 items, the ShopperKing totals averaged more than five percent higher than the FoodBasket totals
- C. many shoppers consider factors other than price in choosing the supermarket at which they shop most regularly
- D. there is little variation from month to month in the overall quantity of purchases made at supermarkets by a given shopper
- E. none of the people who conducted the research were employees of the FoodBasket supermarket

- **69.** Vorland's government is planning a nationwide ban on smoking in restaurants. The objection that the ban would reduce restaurants' revenues is ill founded. Several towns in Vorland enacted restaurant smoking restrictions five years ago. Since then, the amount the government collects in restaurant meal taxes in those towns has increased 34 percent, on average, but only 26 percent elsewhere in Vorland. The amount collected in restaurant meal taxes closely reflects restaurants' revenues. **Which of the following, if true, most undermines the defense of the government's plan?**
 - A. When the state first imposed a restaurant meal tax, opponents predicted that restaurants' revenues would decline as a result, a prediction that proved to be correct in the short term.
 - B. The tax on meals in restaurants is higher than the tax on many other goods and services.
 - C. Over the last five years, smoking has steadily declined throughout Vorland.
 - D. In many of the towns that restrict smoking in restaurants, restaurants can maintain separate dining areas where smoking is permitted.
 - E. Over the last five years, government revenues from sales taxes have grown no faster in the towns with restaurant smoking restrictions than in the towns that have no such restrictions.

A significant number of Qualitex Corporation's department heads are due to retire this year. The number of employees other than current department heads who could take on the position of department head is equal to only about half of the expected vacancies. Oualitex is not going to hire department heads from outside the company or have current department heads take over more than one department, so some departments will be without department heads next year unless Qualitex _____.

- A. promotes some current department heads to higher-level managerial positions
- B. raises the salary for department heads
- C. reduces the number of new employees it hires next year
- D. reduces the average number of employees per department
- E. reduces the number of its departments

71. Which if the following, if true, most logically completes the argument?

Aroca County's public schools are supported primarily by taxes on property. The county plans to eliminate the property tax and support schools with a new three percent sales tax on all retail items sold in the county. Three percent of current retail sales is less than the amount collected through property taxes, but implementation of the plan would not necessarily reduce the amount of money going to Aroca County public schools, because

- A. many Aroca County residents have already left the county because of its high property taxes
- B. a shopping mall likely to draw shoppers from neighboring counties is about to open in Aroca County
- C. at least some Aroca County parents are likely to use the money they will save on property taxes to send their children to private schools not funded by the county
- D. a significant proportion of parents of Aroca County public school students do not own their homes and consequently do not pay property taxes
- E. retailers in Aroca County are not likely to absorb the sales tax by reducing the pretax price of their goods
- **72.** By competing with rodents for seeds, black ants help control rodent populations that pose a public health risk. However, a very aggressive species of blank ant, the Loma ant, which has recently invaded a certain region, has a venomous sting that is often fatal to humans. Therefore, the planned introduction into that region of ant flies, which prey on Loma ants, would benefit public health. **Which of the following, if true, most strengthens the argument?**
 - A. Ant flies do not attack black ants other than Loma ants.
 - B. Loma ants are less effective than many bird species in competing with rodents for seeds.
 - C. Certain other species of black ants are more effective than Loma ants in competing with rodents for seeds.
 - D. The sting of Loma ants can also be fatal to rodents.
 - E. The use of pesticides to control Loma ants could have harmful effects on the environment.

- **73.** Macrophages are cells that play a role in the response of the immune system of mice and other mammals to invasive organisms such as bacteria. Unlike other mice, mice that are genetically incapable of making these particular cells do not show elevated levels of nitrates when infected with bacteria. **The statements above, if true, provide the most support for which of the following conclusions?**
 - A. Mice that are unable either to make macrophages or to make them in sufficient numbers will protect themselves from bacterial infections in some other way.
 - B. Mice that show elevated levels of nitrates can easily fight off most types of bacterial infections.
 - C. In mice, macrophages play a role in the production of nitrates or inhibit a process by which nitrates are broken down or otherwise eliminated.
 - D. When a healthy mouse becomes infected with an invasive organism, the number of macrophages in the mouse's body decreases.
 - E. Injections of nitrates into mice that lack macrophages will not enhance the ability of these animals' immune systems to fight off infection.
- 74. In response to viral infection, the immune systems of mice typically produce antibodies that destroy the virus by binding to proteins on its surface. Mice infected with a herpesvirus generally develop keratitis, a degenerative disease affecting part of the eye. Since proteins on the surface of cells in this part of the eye closely resemble those on the herpesvirus surface, scientists hypothesize that these cases of keratitis are caused by antibodies to herpesvirus. Which of the following, if true, gives the greatest additional support to the scientists' hypothesis?
 - A. Other types of virus have surface proteins that closely resemble proteins found in various organs of mice.
 - B. There are mice that are unable to form antibodies in response to herpes infections, and these mice contract herpes at roughly the same rate as other mice.
 - C. Mice that are infected with a herpesvirus but do not develop keratitis produce as many antibodies as infected mice that do develop keratitis.
 - D. There are mice that are unable to form antibodies in response to herpes infections, and these mice survive these infections without ever developing keratitis.
 - E. Mice that have never been infected with a herpesvirus can sometimes develop keratitis.

- 75. The number of applications for teaching positions in Newtown's public schools was 5.7 percent lower in 1993 than in 1985 and 5.9 percent lower in 1994 than in 1985. Despite a steadily growing student population and an increasing number of teacher resignations, however, Newtown did not face a teacher shortage in the late 1990's. Which of the following, if true, would contribute most to an explanation of the apparent discrepancy above?
 - A. Many of Newtown's public school students do not graduate from high school.
 - B. New housing developments planned for Newtown are slated for occupancy in 1997 and are expected to increase the number of elementary school students in Newtown's public schools by 12 percent.
 - C. The Newtown school board does not contemplate increasing the ratio of students to teachers in the 1990's.
 - D. Teachers' colleges in and near Newtown produced fewer graduates in 1994 than in 1993.
 - E. In 1993 Newtown's public schools received 40 percent more applications for teaching positions than there were positions available.
- **76.** The traditional treatment of strep infections has been a seven-day course of antibiotics, either penicillin or erythromycin. However, since many patients stop taking those drugs within three days, reinfection is common in cases where those drugs are prescribed. A new antibiotic requires only a three-day course of treatment. Therefore, reinfection will probably be less common in cases where the new antibiotic is prescribed than in cases where either penicillin or erythromycin is prescribed. **Which of the following, if true, most strengthens the argument?**
 - A. Some of the people who are allergic to penicillin are likely to be allergic to the new antibiotic.
 - B. A course of treatment with the new antibiotic costs about the same as a course of treatment with either penicillin or erythromycin.
 - C. The new antibiotic has been shown to be effective in eradicating bacterial infections other than strep.
 - D. Some physicians have already begun to prescribe the new antibiotic instead of penicillin or erythromycin for the treatment of some strep infections.
 - E. Regardless of whether they take a traditional antibiotic or the new one, most patients feel fully recovered after taking the drug for three days.

- 77. Driving the steep road to the mountaintop Inca ruins of Machu Picchu is potentially dangerous and hiking there is difficult. Now the Peruvian government is installing a cable car that will make access much easier, and hence result in a large increase in tourism. However, since the presence of large numbers of tourists tends to accelerate the deterioration of a site, installation of the cable car is certain to result in harm to the ruins. Which of the following, if true, most seriously calls into question the argument?
 - A. The daily number of tourists that are expected to take the cable car to Machu Picchu is smaller than the original resident population of Incas.
 - B. The construction of the cable car terminal at Machu Picchu will require the use of potentially damaging heavy machinery at the site.
 - C. Machu Picchu is already one of the most popular tourist sites in Peru.
 - D. Natural weathering will continue to be a more significant cause of the deterioration of Machu Picchu than tourist traffic.
 - E. The cable car will replace the tour buses whose large wheels and corrosive exhaust at present do significant damage to the site.
- 78. Each year red-winged blackbirds stop in a certain region of Midland Province on their spring and fall migrations. In the fall, they eat a significant portion of the province's sunflower crop. This year Midland farmers sought permits to set out small amounts of poisoned rice during the blackbirds' spring stop in order to reduce the fall blackbird population. Some residents voiced concern that the rice could threaten certain species of rare migratory birds. Nevertheless, the wildlife agency approved the permits. Which of the following, if true, most helps to justify the wildlife agency's approval of the permits, given the concerns voiced by some residents?
 - A. In the region where the red-winged blackbirds stop, they are the first birds to be present in the spring.
 - B. The poison that farmers want to use does not kill birds but rather makes them incapable of producing viable eggs.
 - C. Since rice is not raised in Midland Province, few species of birds native to the province normally eat rice.
 - D. Without the permit, any farmers shown to have set out poison for the blackbirds would be heavily fined.
 - E. The poison that farmers got approval to use has no taste or smell that would make it detectable by birds.

- 79. Because mining and refining nickel is costly, researchers have developed an alternative method for extracting nickel using Streptanthus polygaloides, a plant that absorbs and stores nickel form the soil as it grows. The researchers incinerated a crop of Streptanthus they grew in nickel-rich soil. By chemically extracting nickel from the ash, they produced 100 pounds of nickel per acre of land at a total cost per pound slightly above that of current mining. Which of the following, if true, most strongly supports the conclusion that the use of Streptanthus to extract nickel will be commercially adopted?
 - A. The season in which the researchers grew Streptanthus was an unusually favorable one, with the right amount of precipitation to maximize the growth rate of Streptanthus.
 - B. Because lowering the concentration of nickel in the soil can make land much better for agriculture in general, a plot on which Streptanthus has been grown and harvested can be sold for substantially more than it cost.
 - C. More air pollution is generated for each pound of nickel produced by extracting it from Streptanthus than is generated using conventional mining and refining.
 - D. The land on which the researchers planted Streptanthus was unusually free of the various weeds that can compete with Streptanthus for water, nutrients, and sunlight.
 - E. It is extremely rare for soil to contain higher concentrations of nickel than the concentrations present in the researchers' experimental plot.
- **80.** Boreal owls range over a much larger area than do other owls of similar size. The reason for this behavior is probably that the small mammals on which owls feed are especially scarce in the forests where boreal owls live, and the relative scarcity of prey requires the owls to range more extensively to find sufficient food. **Which of the following, if true, most helps to confirm the explanation above?**
 - A. Some boreal owls range over an area eight times larger than the area over which any other owl of similar size ranges.
 - B. Boreal owls range over larger areas in regions where food of the sort eaten by small mammals is sparse than they do in regions where such food is abundant.
 - C. After their young hatch, boreal owls must hunt more often than before in order to feed both themselves and their newly hatched young.
 - D. Sometimes individual boreal owls hunt near a single location for many weeks at a time and do not range farther than a few hundred yards.
 - E. The boreal owl requires less food, relative to its weight, than is required by members of other owl species.

- **81.** Twenty years ago, Balzania put in place regulations requiring operators of surface mines to pay for the reclamation of mined-out land. Since then, reclamation technology has not improved. Yet, the average reclamation cost for a surface coal mine being reclaimed today is only four dollars per ton of coal that the mine produced, less than half what it cost to reclaim surface mines in the years immediately after the regulations took effect. **Which of the following, if true, most helps to account for the drop in reclamation costs described?**
 - A. Even after Balzania began requiring surface mine operators to pay reclamation costs, coal mines in Balzania continued to be less expensive to operate than coal mines in almost any other country.
 - B. In the twenty years since the regulations took effect, the use of coal as a fuel has declined from the level it was at in the previous twenty years.
 - C. Mine operators have generally ceased surface mining in the mountainous areas of Balzania because reclamation costs per ton of coal produced are particularly high for mines in such areas.
 - D. Even after Balzania began requiring surface mine operators to pay reclamation costs, surface mines continued to produce coal at a lower total cost than underground mines.
 - E. As compared to twenty years ago, a greater percentage of the coal mined in Balzania today comes from surface mines.

- **82.** The OLEX Petroleum Company has recently determined that it could cut its refining costs by closing its Grenville refinery and consolidating all refining at its Tasberg refinery. Closing the Grenville refinery, however, would mean the immediate loss of about 1,200 jobs in the Grenville area. Eventually the lives of more than 10,000 people would be seriously disrupted. Therefore, OLEX's decision, announced yesterday, to keep Grenville open shows that at OLEX social concerns sometimes outweigh the desire for higher profits. **Which of the following, if true, most seriously undermines the argument given?**
 - A. The Grenville refinery, although it operates at a higher cost than the Tasberg refinery, has nevertheless been moderately profitable for many years.
 - B. Even though OLEX could consolidate all its refining at the Tasberg plant, doing so at the Grenville plant would not be feasible.
 - C. The Tasberg refinery is more favorably situated than the Grenville refinery with respect to the major supply routes for raw petroleum.
 - D. If the Grenville refinery were ever closed and operations at the Tasberg refinery expanded, job openings at Tasberg would to the extent possible be filled with people formerly employed at Grenville.
 - E. Closure of the Grenville refinery would mean compliance, at enormous cost, with demanding local codes regulating the cleanup of abandoned industrial sites.
- **83.** In Berinia, the age at which people could begin to drink alcohol legally used to be 18. In 1990, in an attempt to reduce alcohol consumption and thereby to reduce alcohol-related traffic deaths among Berinians under 21, the legal drinking age was raised to 21. Alcohol-related traffic deaths among people under 21 have decreased significantly since 1990. Nevertheless, surveys show that people in that age-group drink just as much alcohol as they did before 1990. **Which of the following, if true of Berinia, most helps to resolve the apparent discrepancy?**
 - A. For the population as a whole, annual alcohol consumption is no lower now than it was in 1990.
 - B. Alcohol consumption away from home, for example in bars and restaurants, is much lower among people under 21 than it was in 1990.
 - C. The proportion of people under 21 who own a car is higher now than it was in 1990.
 - D. Alcohol consumption is lower among people under 21 than among adults in most other age-groups.
 - E. Alcohol-related traffic deaths among people over 21 have increased slightly since 1990.

- **84.** Lyme disease is caused by a bacterium transmitted to humans by deer ticks. Generally deer ticks pick up the bacterium while in the larval stage from feeding on infected whitefooted mice. However, certain other species on which the larvae feed do not harbor the bacterium. Therefore, if the population of these other species were increased, the number of ticks acquiring the bacterium and hence the number of people contracting Lyme disease—would likely decline. **Which of the following, if true, most strengthens the argument?**
 - A. Ticks do not suffer any adverse consequences from carrying the bacterium that causes Lyme disease in humans.
 - B. There are no known cases of a human's contracting Lyme disease through contact with white-footed mice.
 - C. A deer tick feeds only once while in the larval stage.
 - D. A single host animal can be the source of bacteria for many tick larvae.
 - E. None of the other species on which deer tick larvae feed harbor other bacteria that ticks transmit to humans.
- **85.** The total market value of real estate in Altonville has steadily declined over the past four years. This decline has meant that the overall figure on which the city's property tax is based—the assessed value of that real estate—has also declined. Moreover, the percentage of assessed value that was paid as property taxes to the city did not change during this period. **The information above most strongly supports which of the following?**
 - A. Money collected from property taxes provided most of Altonville's revenue during the past four years.
 - B. The percentage of Altonville's overall revenue that was collected from property taxes did not change over the past four years.
 - C. Altonville officials had proposed raising property tax rates during the past four years but never did so because of strong opposition from property owners.
 - D. The total amount of revenue that Altonville has collected from property taxes has declined over the past four years.
 - E. During the past four years, Altonville officials also did not increase tax rates on other sources of revenue such as retail sales or business profits.

86. Which of the following most logically completes the argument given?

People in isolated rain-forest communities tend to live on a largely vegetarian diet, and they eat little salt. Few of them suffer from high blood pressure, and their blood pressure does not tend to increase with age, as is common in industrialized countries. Such people often do develop high blood pressure when they move to cities and adopt high-salt diets. Though suggestive, these facts do not establish salt as the culprit in high blood pressure, however, because

- A. genetic factors could account for the lack of increase of blood pressure with age among such people
- B. people eating high-salt diets and living from birth in cities in industrialized societies generally have a tendency to have high blood pressure
- C. it is possible to have a low-salt diet while living in a city in an industrialized country
- D. there are changes in other aspects of diet when such people move to the city
- E. salt is a necessity for human life, and death can occur when the body loses too much salt
- 87. **Highway Official:** When resurfacing our concrete bridges, we should use electrically conductive concrete (ECC) rather than standard concrete. In the winter, ECC can be heated by passing an electric current through it, thereby preventing ice buildup. The cost of the electricity needed is substantially lower than the cost of the de-icing salt we currently use. **Taxpayer:** But construction costs for ECC are much higher than for standard concrete, so your proposal is probably not justifiable on economic grounds.

Which of the following, if true, could best be used to support the highway official's proposal in the face of taxpayer's objection?

- A. The use of de-icing salt causes corrosion of the reinforcing steel in concrete bridge decks and damage to the concrete itself, thereby considerably shortening the useful life of concrete bridges.
- B. Severe icing conditions can cause power outages and slow down the work of emergency crews trying to get power restored.
- C. In weather conditions conducive to icing, ice generally forms on the concrete surfaces of bridges well before it forms on parts of the roadway that go over solid ground.
- D. Aside from its potential use for de-icing bridges, ECC might also be an effective means of keeping other concrete structures such as parking garages and airport runways ice free.
- E. If ECC were to be used for a bridge surface, the electric current would be turned on only at times at which ice was likely to form.

Mastitis is an infection of the udder in cows that, although not dangerous, causes them to give poor-quality milk. Most cases of mastitis are caused by the bacterium *Staphylococcus aureus*, against which antibiotics are ineffective. However, a related bacterium, *Staphylococcus simulans*, quickly clears up even severe infections of *Staphylococcus aureus* simply by displacing the bacteria. *Staphylococcus simulans* is nevertheless unlikely to become the preferred treatment for cases of mastitis, since ______.

- A. certain dangerous bacteria that normally cannot take hold can do so in the presence of *S. simulans*.
- B. the current resistance of *S. aureus* to antibiotics derives in part from a past pattern of overuse of those antibiotics
- C. the milk from cows infected with *S. aureus* is generally not of such poor quality as to be entirely unusable
- D. careful farming practice can reduce the incidence of mastitis to a minimum
- E. the only symptom of mild cases of mastitis is the deterioration in the quality of the milk produced
- 89. In the past, most children who went sledding in the winter snow in Verland used wooden sleds with runners and steering bars. Ten years ago, smooth plastic sleds became popular; they go faster than wooden sleds but are harder to steer and slow. The concern that plastic sleds are more dangerous is clearly borne out by the fact that the number of children injured while sledding was much higher last winter than it was ten years ago. Which of the following, if true in Verland, most seriously undermines the force of the evidence cited?
 - A. A few children still use traditional wooden sleds.
 - B. Very few children wear any kind of protective gear, such as helmets, while sledding.
 - C. Plastic sleds can be used in a much wider variety of snow conditions than wooden sleds can.
 - D. Most sledding injuries occur when a sled collides with a tree, a rock, or another sled.
 - E. Because the traditional wooden sled can carry more than one rider, an accident involving a wooden sled can result in several children being injured.

- **90.** A manufacturer of workstations for computer-aided design seeks to increase sales to its most important corporate customers. Its strategy is to publish very low list prices for workstations in order to generate interest among the buyers for those corporations. **Which of the following, if characteristic of the marketplace, would tend to cause the manufacture's strategy to fail?**
 - A. The proposed list prices would seem low to a typical buyer for the manufacturer's most important corporate customers.
 - B. The capabilities of workstations suitable for given jobs are not significantly different among various manufactures.
 - C. The manufacturer's most important corporate customers employ as buyers persons who are very knowledgeable about prices for workstations for customer-aided design.
 - D. customers differ significantly in the percentage of resources they can devote to computer workstations.
 - E. Buyers for corporations that purchase workstations for computer-aided design receive bonuses for negotiating large discounts from the list price.

The attribution of the choral work *Lacrimae* to the composer Pescard (1400 - 1474) has been regarded as tentative, since it was based on a single treatise from the early 1500's that named Pescard as the composer. Recently, several musical treatises from the late 1500's have come to light, all of which name Pescard as the composer of *Lacrimae*. Unfortunately, these newly discovered treatises lend no support to the attribution of *Lacrimae* to Pescard, since ______.

- A. the treatise from the early 1500's misidentifies the composers of some of the musical works it considers
- B. the author of the treatise from the early 1500's had no very strong evidence on which to base the identification of Pescard as the composer of *Lacrimae*
- C. there are works that can conclusively be attributed to Pescard that are not even mentioned in the treatise from the early 1500's
- D. the later treatises probably had no source for their attribution other than the earlier treatise
- E. no known treatises from the 1600's identify Pescard as the composer of *Lacrimae*

- **92. Editorial:** The roof of Northtown Council's equipment-storage building collapsed under the weight of last week's heavy snowfall. The building was constructed recently and met local building-safety codes in every particular, except that the nails used for attaching roof supports to the building's columns were of a smaller size than the codes specify for this purpose. Clearly, this collapse exemplifies how even a single, apparently insignificant, departure from safety standards can have severe consequences. **Which of the following, if true, most strongly supports the editorial's argument?**
 - A. The only other buildings whose roofs collapsed from the weight of the snowfall were older buildings constructed according to less exacting standards than those in the safety codes.
 - B. Because of the particular location of the equipment-storage building, the weight of snow on its roof was greater than the maximum weight allowed for in the safety codes.
 - C. Because the equipment-storage building was not intended for human occupation, some safety-code provisions that would have applied to an office building did not apply to it.
 - D. The columns of the building were no stronger than the building-safety codes required for such a building.
 - E. Because the equipment-storage building was where the council kept snow removal equipment, the building was almost completely empty when the roof collapsed.
- **93.** In parts of the Caribbean, the manatee, an endangered marine mammal, has long been hunted for its meat. Having noted the manatee hunters' expert knowledge of manatees' habits, local conservationists are encouraging the hunters to stop hunting and instead to take tourists on boat rides to see manatees. Tourist interest is high, so the plan has promise of achieving the twin goals of giving the former hunters a good income and helping ensure the manatees' survival. **Which of the following, if true, raises the most serious doubt about the plan's chance of success?**
 - A. Many tourists who visit these parts of the Caribbean are uninterested in manatees and would not be willing to pay what the former manatee hunters would have to charge for boat rides to see manatees.
 - B. Recovery of the species would enable some hunting to continue without putting the manatees' survival in jeopardy again.
 - C. In areas where manatees have traditionally been hunted for food, local people could easily replace the manatee meat in their diets with other foods obtained from the sea.
 - D. There would not be enough former manatee hunters to act as guides for all the tourists who want to see manatees.
 - E. To maintain their current income, manatee hunters who switched to guiding tourists would have to use far larger boats and make many more trips into the manatees' fragile habitat than they currently do.
- **94.** Many residents of Calovia are committed to using products containing recycled materials. Soon these consumers will get help in identifying such products from a book being published by the Calovian government. The book offers a comprehensive listing, by product type and brand, of goods sold in Calovia that contain recycled material. Therefore, publication of the book will almost certainly increase the use of products containing recycled materials in Calovia. **Which of the following, if true, most strengthens the argument?**
 - A. Proceeds from the sale of the book are not expected to exceed the cost of its publication.
 - B. For numerous types of products, there are many brands that use recycled materials, although their manufacturers and distributors do nothing to advertise those brands' recycled content.
 - C. For many materials, such as plastics, the recycling process results in a lower grade of material with a correspondingly different range of uses.
 - D. For many types of products listed in the book, all the brands available in Calovia use recycled materials.

E. Many manufacturers of products that contain recycled materials vary the proportion of recycled materials in those products in response to changes in price and availability.

95. Which of the following most logically completes the argument below?

The expansion of large-scale farming in Africa and Asia has destroyed much of the natural vegetation on which elephants have historically depended, forcing them to turn to cultivated land to satisfy their enormous appetites. As a result, farmers have lost millions of dollars worth of crops annually. Yet even if elephant sanctuaries were created on a widespread basis to guarantee elephants sufficient natural vegetation, the raiding would likely persist, since

- A. when elephants forage for food, they typically travel in herds.
- B. foraging elephants have been known to cause substantial damage even to plants that they do not eat.
- C. some of the land where crops have suffered extensive damage from elephants has been allowed to return to its natural state.
- D. elephants tend to prefer cultivated crops to wild vegetation as a food source.
- E. elephant sanctuaries are usually created in areas that are rich in the natural vegetation on which elephants have historically depended.

- 96. In 1983 Argonia's currency, the argon, underwent a reduction in value relative to the world's strongest currencies. This reduction resulted in a significant increase in Argonia's exports over 1982 levels. In 1987 a similar reduction in the value of the argon led to another increase in Argonia's exports. Faced with the need to increase exports yet again, Argonia's finance minister has proposed another reduction in the value of the argon. Which of the following, if true, most strongly supports the prediction that the finance minister's plan will not result in a significant increase in Argonia's exports next year?
 - A. The value of the argon rose sharply last year against the world's strongest currencies.
 - B. In 1988 the argon lost a small amount of its value, and Aronian exports rose slightly in 1989.
 - C. The value of Argonia's exports was lower last year than it was the year before.
 - D. All of Argonia's export products are made by factories that were operating at full capacity last year, and new factories would take years to build.
 - E. Reductions in the value of the argon have almost always led to significant reductions in the amount of goods and services that Argonians purchase from abroad.
- 97. Healthy lungs produce a natural antibiotic that protects them from infection by routinely killing harmful bacteria on airway surfaces. People with cystic fibroses, however, are unable to fight off such bacteria, even though their lungs produce normal amounts of the antibiotic. Since the fluid on airway surfaces in the lungs of people with cystic fibrosis has an abnormally high salt concentration, scientists hypothesize that in high salt environments the antibiotic becomes ineffective at killing harmful bacteria. Which of the following, if it were obtained as an experimental result, would most decisively undermine the scientists' hypothesis?
 - A. Healthy lungs in which the salt concentration of the airway-surface fluid has been substantially increased are able to reestablish their normal salt concentration within a relatively short period of time.
 - B. The antibiotic produced by the lungs is effective at killing harmful bacteria even when salt concentrations are below levels typical of healthy lungs.
 - C. The salt concentration of the airway-surface fluid in the lungs of people who suffer from cystic fibrosis tends to return to its former high levels after having been reduced to levels typical of healthy lungs.
 - D. The lungs of people who suffer from cystic fibrosis are unable to fight off harmful bacteria even when the salt concentration is reduced to levels typical of healthy lungs.
 - E. The salt concentration in the airway-surface fluid of people whose lungs produce lower-than-average amounts of the antibiotic is generally much lower than that typical of healthy lungs.

98. Which of the following most logically completes the argument below?

According to promotional material published by the city of Springfield, more tourists stay in hotels in Springfield than stay in the neighboring city of Harristown. A brochure from the largest hotel in Harristown claims that more tourists stay in that hotel than stay in the Royal Arms Hotel in Springfield. If both of these sources are accurate, however, the "Report on Tourism" for the region must be in error in stating that ______.

- A. the average length of stay is longer at the largest hotel in Harristown than it is at the Royal Arms Hotel.
- B. There is only one hotel in Harristown that is larger than the Royal Arms Hotel.
- C. More tourists stay in hotels in Harristown than stay in the Royal Arms Hotel.
- D. The Royal Arms hotel is the largest hotel in Springfield.
- E. The royal arms hotel is the only hotel in Springfield.
- **99.** Often patients with ankle fractures that are stable, and thus do not require surgery, are given follow-up x-rays because their orthopedists are concerned about possibly having misjudged the stability of the fracture. When a number of follow-up x-rays were reviewed, however, all the fractures that had initially been judged stable were found to have healed correctly. Therefore, it is a waste of money to order follow-up x-rays of ankle fracture initially judged stable. **Which of the following, if true, most strengthens the argument?**
 - A. Doctors who are general practitioners rather than orthopedists are less likely than orthopedists to judge the stability of an ankle fracture correctly.
 - B. Many ankle injuries for which an initial x-ray is ordered are revealed by the x-ray not to involve any fracture of the ankle.
 - C. X-rays of patients of many different orthopedists working in several hospitals were reviewed.
 - D. The healing of ankle fractures that have been surgically repaired is always checked by means of a follow-up x-ray.
 - E. Orthopedists routinely order follow-up x-rays for fractures of bone other than ankle bones.

On the whole, scientists do their most creative work before age forty, a tendency that has been taken to show that aging carries with it a loss of creative capacity. An alternative explanation is that by age forty most scientists have worked in their field for fifteen or more years and that by then they have exhausted the opportunity for creative work in that field. Supporting this explanation is the finding that ______

- A. the average age of recipients of scientific research grants is significantly greater than forty.
- B. a disproportionately large number of the scientists who produce highly creative work beyond age forty entered their field at an older age than is common.
- C. many scientists temper their own expectations of what they can achieve in their research work by their belief that their creativity will decline as they age.
- D. scientists who are older than forty tend to find more satisfaction in other activities, such as teaching and mentoring, than they do in pursuing their own research.
- E. there is a similar diminution of creativity with age in nonscientific fields, such as poetry and musical composition.

101. Which of the following most logically completes the editorial below?

Editorial in Golbindian Newspaper: For almost three months, opposition parties have been mounting daily street demonstrations in the capital in an effort to pressure the ruling party into calling an election. Though the demonstrations were well attended at first, attendance has declined steadily in recent weeks. However, the decline in attendance does not indicate that popular support for the opposition's demands is dropping, since

- A. the opposition's demands have not changed during the period when the street demonstrations have been mounted.
- B. No foreign governments have expressed any support for the opposition's demands.
- C. The state-controlled media have ceased any mention of the demonstrations, leaving many citizens outside the capital with no way of knowing that demonstrations continue.
- D. There have not recently been any antigovernment demonstrations in cities other than the capital.
- E. A recent sharp decrease in unemployment has led to increased popular support for the government.

- 102. The chemical adenosine is released by brain cells when those cells are active. Adenosine then binds to more and more sites on cells in certain areas of the brain, as the total amount released gradually increases during wakefulness. During sleep, the number of sites to which adenosine is bound decreases. Some researchers have hypothesized that it is the cumulative binding of adenosine to a large number of sites that causes the onset of sleep. Which of the following, if true, provides the most support for the researchers' hypothesis?
 - A. Even after long periods of sleep when adenosine is at its lowest concentration in the brain, the number of brain cells bound with adenosine remains very large.
 - B. Caffeine, which has the effect of making people remain wakeful, is known to interfere with the binding of adenosine to sites on brain cells.
 - C. Besides binding to sites in the brain, adenosine is known to be involved in biochemical reactions throughout the body.
 - D. Some areas of the brain that are relatively inactive nonetheless release some adenosine.
 - E. Stress resulting from a dangerous situation can preserve wakefulness even when brain levels of bound adenosine are high.
- 103. Consumers planning to buy recreational equipment tend to buy higher quality, more expensive equipment when the economy is strong than when it is weak. Hill and Dale is a business that sells high-quality, expensive camping and hiking equipment in Boravia. Although all the signs are that Boravia's economy is now entering a period of sustained strength, the managers of the business do not expect a substantial increase in sales. Which of the following, if true, would provide the strongest justification for the managers' judgment?
 - A. A significant proportion of Hill and Dale's sales are made to customers who enter the store in order to buy one particular item but, once there, find other items to buy as well.
 - B. In Boravia when the economy is strong, those who might otherwise go camping tend to take vacations overseas.
 - C. The economic upturn is likely to allow Boravia's national parks, where most of the camping and hiking is done, to receive extra funding to improve their visitor facilities.
 - D. Advances in materials technology have led to the development of hiking and camping equipment that is more comfortable and lightweight than before.
 - E. Many people in Boravia not only are committed to preserving the country's wilderness areas but also are interested in spending some time in them.

- **104. Educational Theorist:** Recent editorials have called for limits on the amount of homework assigned to children. They point out that free-time activities play an important role in childhood development and that large amounts of homework reduce children's free time, hindering their development. But the average homework time for a ten year old, for example, is little more than 30 minutes per night. Clearly, therefore, there is no need to impose the limits these editorials are calling for. **Which of the following is an assumption on which the educational theorist's argument relies?**
 - A. The free-time activities that ten year olds engage in most are all approximately equally effective at fostering development
 - B. Regularly doing homework assignments improves children's academic performance.
 - C. Individual teachers are not the best judges of how much homework to assign the children they teach
 - D. In most schools, if not all, the homework assignments given are of a length that does not diverge widely from the average.
 - E. Free-time activities rarely teach children skills or information that they can use in their academic work.

- 105. Electronic computer chips made of tiny silicon wafers now regularly contain millions of electronic switches. Unfortunately, electronic switches that are this small cannot withstand intense radiation. Micro-Mechanics plans to produce a chip that, because it uses only microscopic mechanical switches, will be invulnerable to radiation damage. The switches will, however, be slower than electronic switches and the chip will contain only 12,000 switches. For there to be a market for Micro-Mechanics' chip as a result of the apparent advantage described above, each of the following would have to be true EXCEPT:
 - A. There will be applications in which the speed attainable by an electronic switch is not essential.
 - B. Switches used on electronic chips that contain only 12,000 switches are more vulnerable to radiation damage than the switches on Micro-Mechanics' chip will be.
 - C. There will be applications for computer chips in environments where the chips may have to survive intense radiation.
 - D. Some devices in which computer chips will be used will have other components that will be able to function during or after exposure to radiation.
 - E. Manufacturers are able to protect electronic computer chips against exposure to intense radiation, where this protection is necessary.
- 106. In order to raise revenue, the federal government planned a tax amnesty program that allows tax delinquents to pay all owed tax without added financial penalty. However, economists projected that the federal government would collect a far lower percentage of total tax owed by delinquents than did state governments implementing similar programs. Which of the following, if true, would most contribute to an explanation of the economists' projections?
 - A. Tax amnesty programs are only successful if they are widely publicized.
 - B. Most people who honestly pay their state tax are equally honest in paying their federal tax.
 - C. Although federal tax delinquents usually must pay high financial penalties, the states require far lower financial penalties.
 - D. The state tax rate varies considerably from state to state, but the federal tax is levied according to laws which apply to citizens of all the states.
 - E. Unlike most federal tax delinquents, most state tax delinquents fail to pay state tax because of an oversight rather than a decision not to pay.

- 107. Whales originated in the freshwater lakes and rivers of ancient Asia about sixty million years ago. Not until about ten million years later did species of whales develop specialized kidneys enabling them to drink salt water. Although fossil evidence shows that some early whale species that lacked such kidneys sometimes swam in the Earth's saltwater oceans, these species must have had to return frequently to freshwater rivers to drink. Which of the following is most strongly supported by the information given?
 - A. Fossils of whale species dating from between sixty million and fifty million years ago will not be found on continents that were at the time separated from ancient Asia by wide expanses of ocean.
 - B. Among whale fossils that date from later than about fifty million years ago, none are fossils of whale species that drank only fresh water.
 - C. Fossils of whale species that drank fresh water will not be found in close proximity to fossils of whale species that drank salt water.
 - D. The earliest whales that drank salt water differed from fresh-water-drinking whales only in their possession of specialized kidneys.
 - E. Between sixty million and fifty million years ago, the freshwater lakes and rivers in which whales originated were gradually invaded by salt water.
- 108. In polluted environments, dolphins gradually accumulate toxins in their body fat, and the larger the dolphin the more accumulated toxin it can tolerate. Nearly 80 percent of the toxins a female dolphin has accumulated pass into the fat-rich milk her nursing calf ingests. Therefore, the unusually high mortality rate among dolphin calves in the industrially contaminated waters along Florida's Gulf Coast is probably the result of their being poisoned by their mother's milk. Which of the following, if true, most strengthens the argument?
 - A. The survival rate of firstborn dolphin calves in the area along Florida's Gulf Coast is highest for those whose mothers were killed before they were weaned.
 - B. The rate at which adult dolphins living in the waters along Florida's Gulf Coast accumulate toxins is no higher than that of adult dolphins in comparably polluted waters elsewhere.
 - C. Among dolphin calves born in the area along Florida's Gulf Coast, the mortality rate is highest among those with living siblings.
 - D. As dolphins age, they accumulate toxins from the environment more slowly than when they were young.
 - E. Dolphins, like other marine mammals, have a higher proportion of body fat than do most land mammals.

- 109. In 1960's studies of rats, scientists found that crowding increases the number of attacks among the animals significantly. But in recent experiments in which rhesus monkeys were placed in crowded conditions, although there was an increase in instances of "coping" behavior—such as submissive gestures and avoidance of dominant individuals—attacks did not become any more frequent. Therefore it is not likely that, for any species of monkey, crowding increases aggression as significantly as was seen in rats. Which of the following, if true, most strengthens the argument?
 - A. All the observed forms of coping behavior can be found among rhesus monkeys living in uncrowded conditions.
 - B. In the studies of rats, nondominant individuals were found to increasingly avoid dominant individuals when the animals were in crowded conditions.
 - C. Rhesus monkeys respond with aggression to a wider range of stimuli than any other monkeys do.
 - D. Some individual monkeys in the experiment were involved in significantly more attacks than the other monkeys were.
 - E. Some of the coping behavior displayed by rhesus monkeys is similar to behavior rhesus monkeys use to bring to an end an attack that has begun.
- 110. Paper&Print is a chain of British stores selling magazines, books, and stationery products. In Britain, magazines' retail prices are set by publishers, and the retailer's share of a magazine's retail price is 25 percent. Since Paper&Print's margin on books and stationery products is much higher, the chain's management plans to devote more of its stores' shelf space to books and stationery products and reduce the number of magazine titles that its stores carry. Which of the following, if true, most strongly argues that the plan, if put into effect, will not increase Paper&Print's profits?
 - A. Recently magazine publishers, seeking to increase share in competitive sectors of the market, have been competitively cutting the retail prices of some of the largest circulation magazines.
 - B. In market research surveys, few consumers identify Paper&Print as a book or stationery store but many recognize and value the broad range of magazines it carries.
 - C. The publisher's share of a magazine's retail price is 50 percent, and the publisher also retains all of the magazine's advertising revenue.
 - D. Consumers who subscribe to a magazine generally pay less per issue than they would if they bought the magazine through a retail outlet such as Paper&Print.
 - E. Some of Paper& Print's locations are in small towns and represent the only retail outlet for books within the community.

- 111. In the nation of Partoria, large trucks currently account for 6 percent of miles driven on Partoria's roads but are involved in 12 percent of all highway fatalities. The very largest trucks—those with three trailers—had less than a third of the accident rate of single-and double-trailer trucks. Clearly, therefore, one way for Partoria to reduce highway deaths would be to require shippers to increase their use of triple-trailer trucks. Which of the following, if true, most seriously weakens the argument?
 - A. Partorian trucking companies have so far used triple-trailer trucks on lightly traveled sections of major highways only.
 - B. No matter what changes Partoria makes in the regulation of trucking, it will have to keep some smaller roads off-limits to all large trucks.
 - C. Very few fatal collisions involving trucks in Partoria are collisions between two trucks.
 - D. In Partoria, the safety record of the trucking industry as a whole has improved slightly over the past ten years.
 - E. In Partoria, the maximum legal payload of a triple-trailer truck is less than three times the maximum legal payload of the largest of the single-trailer trucks.

Concerned about financial well-being of its elderly citizens, the government of Runagia decided two years ago to increase by 20 percent the government-provided pension paid to all Runagians over 65. Inflation in the intervening period has been negligible, and the increase has been duly received by all eligible Runagians. Nevertheless, many of them are no better off financially than they were before the increase, in large part because

- A. They rely entirely on the government pension for their income
- B. Runagian banks are so inefficient that it can take up to three weeks to cash a pension check
- C. They buy goods whose prices tend to rise especially fast in times of inflation
- D. The pension was increased when the number of elderly Runagians below the poverty level reached an all-time high
- E. In Runagia children typically supplement the income of elderly parents, but only by enough to provide them with a comfortable living

- 113. Plankton generally thrive in areas of the ocean with sufficient concentrations of certain nitrogen compounds near the surface, where plankton live. Nevertheless, some areas, though rich in these nitrogen compounds, have few plankton. These areas have particularly low concentrations of iron, and oceanographers hypothesize that this shortage of iron prevents plankton from thriving. However, an experimental release of iron compounds into one such area failed to produce a thriving plankton population, even though local iron concentrations increased immediately. Which of the following, if true, argues most strongly against concluding, on the basis of the information above, that the oceanographers' hypothesis is false?
 - A. Not all of the nitrogen compounds that are sometimes found in relatively high concentrations in the oceans are nutrients for plankton.
 - B. Certain areas of the ocean support an abundance of plankton despite having particularly low concentrations of iron.
 - C. The release of the iron compounds did not increase the supply of nitrogen compounds in the area.
 - D. A few days after the iron compounds were released, ocean currents displaced the iron-rich water from the surface.
 - E. The iron compounds released into the area occur naturally in areas of the ocean where plankton thrive.
- 114. Lofgren's disease has been observed frequently in commercially raised cattle but very rarely in chickens. Both cattle and chickens raised for meat are often fed the type of feed that transmits the virus that causes the disease. Animals infected with the virus take more than a year to develop symptoms of Lofgren's disease, however, and chickens commercially raised for meat, unlike cattle, are generally brought to market during their first year of life. Which of the following is most strongly supported by the information provided?
 - A. The virus that causes Lofgren's disease cannot be transmitted to human beings by chickens.
 - B. There is no way to determine whether a chicken is infected with the Lofgren's disease virus before the chicken shows symptoms of the disease.
 - C. A failure to observe Lofgren's disease in commercial chicken populations is not good evidence that chickens are immune to the virus that causes this disease.
 - D. An animal that has been infected with the virus that causes Lofgren's disease but that has not developed symptoms cannot transmit the disease to an uninfected animal of the same species.
 - E. The feed that chickens and cattle are fed is probably not the only source of the virus that causes Lofgren's disease.

115. Which of the following, if true, provides evidence that most logically completes the argument below?

According to a widely held economic hypothesis, imposing strict environmental regulations reduces economic growth. This hypothesis is undermined by the fact that the states with the strictest environmental regulations also have the highest economic growth. This fact does not show that environmental regulations promote growth, however, since _____.

- A. those states with the strictest environmental regulations invest the most in education and job training
- B. even those states that have only moderately strict environmental regulations have higher growth than those with the least-strict regulations
- C. many states that are experiencing reduced economic growth are considering weakening their environmental regulations
- D. after introducing stricter environmental regulations, many states experienced increased economic growth
- E. even those states with very weak environmental regulations have experienced at least some growth
- 116. Political Advertisement: Mayor Delmont's critics complain about the jobs that were lost in the city under Delmont's leadership. Yet the fact is that not only were more jobs created than were eliminated, but each year since Delmont took office the average pay for the new jobs created has been higher than that year's average pay for jobs citywide. So it stands to reason that throughout Delmont's tenure the average paycheck in this city has been getting steadily bigger. Which of the following, if true, most seriously weakens the argument in the advertisement?
 - A. The unemployment rate in the city is higher today than it was when Mayor Delmont took office.
 - B. The average pay for jobs in the city was at a ten-year low when Mayor Delmont took office.
 - C. Each year during Mayor Delmont's tenure, the average pay for jobs that were eliminated has been higher than the average pay for jobs citywide.
 - D. Most of the jobs eliminated during Mayor Delmont's tenure were in declining industries.
 - E. The average pay for jobs in the city is currently lower than it is for jobs in the suburbs surrounding the city.

- 117. The total market value of real estate in Altonville has steadily declined over the past four years. This decline has meant that the overall figure on which the city's property tax is based—the assessed value of that real estate—has also declined. The percentage of assessed value that was paid as property taxes to the city, however, did not change from year to year during this period. The information above most strongly supports which of the following?
 - A. The percentage of Altonville's yearly revenue that comes from money collected in property taxes did not change over the past four years.
 - B. The percentage of Altonville's yearly revenue that comes from money collected in property taxes has declined steadily over the past four years.
 - C. The amount of revenue that Altonville collected from property taxes was lower last year than it was four years ago.
 - D. During the past four years, Altonville officials increased tax rates on other sources of revenue such as retail sales and business profits.
 - E. Altonville will soon require property owners to pay a higher percentage of the assessed value of their property as property tax.
- **118.** Rabbits were introduced to Numa Island in the nineteenth century. Overgrazing by the enormous population of rabbits now menaces the island's agriculture. The government proposes to reduce the population by using a virus that has caused devastating epidemics in rabbit populations elsewhere. There is, however, a chance that the virus will infect the bilby, an endangered native marsupial. The government's plan, therefore, may serve the interests of agriculture but will clearly increase the threat to native wildlife. **Which of the following, if true, most seriously weakens the argument?**
 - A. There is less chance that the virus will infect domestic animals on Numa than that it will infect bilbies.
 - B. There are no species of animals on the island that prey on the rabbits.
 - C. Overgrazing by rabbits endangers many of the plants on which bilbies feed.
 - D. The virus that the government proposes to use has been successfully used elsewhere to control populations of rabbits.
 - E. There is no alternative means of reducing the rabbit population that would involve no threat to the bilby.

- 119. Mice that have been given morphine are very likely to develop blood poisoning because bacteria that normally reside in the intestine typically respond to morphine by migrating into the bloodstream. However, when mice are given both morphine and the new drug naltrexone, blood poisoning is much less frequent, although it does still occur. These results provide support for researchers' prediction that naltrexone will turn out to be toxic to certain types of bacteria. Which of the following, if discovered to be true, would most seriously weaken the support for the researchers' prediction?
 - A. After being administered to mice, naltrexone does not pass from the bloodstream into the intestine.
 - B. Naltrexone inhibits morphine from triggering the migration of intestinal bacteria into the bloodstream.
 - C. Mice that have been given naltrexone but not morphine have no greater risk of developing blood poisoning than do mice that have not been given either substance.
 - D. The increased risk of blood poisoning is not the only harmful effect on mice of being given morphine.
 - E. Conditions other than the presence of intestinal bacteria in the bloodstream can cause blood poisoning in mice.
- 120. Industrial accidents are more common when some of the people in safety-sensitive jobs have drinking problems than when none do. Since, even after treatment, people who have had drinking problems are somewhat more likely than other people to have drinking problems in the future, any employer trying to reduce the risk of accidents should bar anyone who has ever been treated for a drinking problem from holding a safety-sensitive job. Which of the following, if true, most seriously undermines the argument above?
 - A. Some companies place employees who are being treated for drinking problems in residential programs and allow them several weeks of paid sick leave.
 - B. Many accidents in the workplace are the result of errors by employees who do not hold safety-sensitive jobs.
 - C. Workers who would permanently lose their jobs if they sought treatment for a drinking problem try instead to conceal their problem and continue working for as long as possible.
 - D. People who hold safety-sensitive jobs are subject to stresses that can exacerbate any personal problems they may have, including drinking problems.
 - E. Some industrial accidents are caused by equipment failure rather than by employee error.

- 121. A major chemical spill occurred five years ago at Baker's Beach, the world's sole nesting ground for Merrick sea turtles, and prevented nearly all the eggs laid that year from hatching. Yet the number of adult female Merricks returning to lay their eggs at Baker's Beach has actually increased somewhat since five years ago. Clearly, environmentalists' prediction that the world's Merrick population would decline as a result of the spill has proven unfounded. Which of the following, if true, most seriously undermines the argument offered in refutation of the environmentalists' prediction?
 - A. The chemical spill five years ago occurred at a time when there were neither Merrick sea turtles nor Merrick sea turtle eggs on Baker's Beach.
 - B. Female Merrick sea turtles begin returning to Baker's Beach to lay their eggs when they are ten years old.
 - C. Under normal conditions, only a small proportion of hatchling female Merrick sea turtles survive in the ocean until adulthood and return to lay their eggs at Baker's Beach.
 - D. Environmental pressures unrelated to the chemical spill have caused a significant decline in the population of one of the several species of sea birds that prey on Merrick sea turtle eggs.
 - E. After the chemical spill, an environmental group rejected a proposal to increase the Merrick sea turtle population by transferring eggs from Baker's Beach to nearby beaches that had not been affected by the spill.
- 122. In order to reduce the number of items damaged while in transit to customers, packaging consultants recommended that the TrueSave mail-order company increase the amount of packing material so as to fill any empty spaces in its cartons. Accordingly, TrueSave officials instructed the company's packers to use more packing material than before, and the packers zealously acted on these instructions and used as much as they could. Nevertheless, customer reports of damaged items rose somewhat. Which of the following, if true, most helps to explain why acting on the consultants' recommendation failed to achieve its goal?
 - A. The change in packing policy led to an increase in expenditure on packing material and labor.
 - B. When packing material is compressed too densely, it loses some of its capacity to absorb shock.
 - C. The amount of packing material used in a carton does not significantly influence the ease with which a customer can unpack the package.
 - D. Most of the goods that TrueSave ships are electronic products that are highly vulnerable to being damaged in transit.
 - E. TrueSave has lost some of its regular customers as a result of the high number of damaged items they received.
- 123. **Finding of a survey of Systems magazine subscribers:** Thirty percent of all merchandise orders placed by subscribers in response to advertisements in the magazine last year were placed by subscribers under age thirty-five.
 - **Finding of a survey of advertisers in Systems magazine:** Most of the merchandise orders placed in response to advertisements in Systems last year were placed by people under age thirty-five.

For both of the findings to be accurate, which of the following must be true?

- A. More subscribers to Systems who have never ordered merchandise in response to advertisements in the magazine are age thirty-five or over than are under age thirty-five.
- B. Among subscribers to Systems, the proportion who are under age thirty-five was considerably lower last year than it is now.
- C. Most merchandise orders placed in response to advertisements in Systems last year were placed by Systems subscribers over age thirty-five.

- D. Last year, the average dollar amount of merchandise orders placed was less for subscribers under age thirty-five than for those age thirty-five or over.
- E. Last year many people who placed orders for merchandise in response to advertisements in Systems were not subscribers to the magazine.
- 124. Editorial: In Ledland, unemployed adults receive government assistance. To reduce unemployment, the government proposes to supplement the income of those who accept jobs that pay less than government assistance, thus enabling employers to hire workers cheaply. However, the supplement will not raise any worker's income above what government assistance would provide if he or she were not gainfully employed. Therefore, unemployed people will have no financial incentive to accept jobs that would entitle them to the supplement. Which of the following, if true about Ledland, most seriously weakens the argument of the editorial?
 - A. The government collects no taxes on assistance it provides to unemployed individuals and their families.
 - B. Neighboring countries with laws that mandate the minimum wage an employer must pay an employee have higher unemployment rates than Ledland currently has.
 - C. People who are employed and look for a new job tend to get higher-paying jobs than job seekers who are unemployed.
 - D. The yearly amount unemployed people receive from government assistance is less than the yearly income that the government defines as the poverty level.
 - E. People sometimes accept jobs that pay relatively little simply because they enjoy the work.

- 125. The recent upheaval in the office-equipment retail business, in which many small firms have gone out of business, has been attributed to the advent of office equipment "superstores" whose high sales volume keeps their prices low. This analysis is flawed, however, since even today the superstores control a very small share of the retail market. Which of the following, if true, would most weaken the argument that the analysis is flawed?
 - (A) Most of the larger customers for office equipment purchase under contract directly from manufacturers and thus do not participate in the retail market.
 - (B) The superstores' heavy advertising of their low prices has forces prices down throughout the retail market for office supplies.
 - (C) Some of the superstores that only recently opened have themselves gone out of business.
 - (D) Most of the office equipment superstores are owned by large retailing chains that also own stores selling other types of goods.
 - (E) The growing importance of computers in most offices has changed the kind of office equipment retailers must stock.
- 126. In parts of South America, vitamin-A deficiency is a serious health problem, especially among children. In one region, agriculturists hope to improve nutrition by encouraging farmers to plant a new variety of sweet potato called SPK004 that is rich in beta-carotene, which the body converts into vitamin A. The plan has good chances of success, since sweet potato is a staple of the region's diet and agriculture, and the varieties currently grown contain little beta-carotene.

Which of the following, if true, most strongly supports the prediction that the plan will succeed?

- (A) There are other vegetables currently grown in the region that contain more betacarotene than the currently cultivated varieties of sweet potato do.
- (B) The flesh of SPK004 differs from that of the currently cultivated sweet potatoes in colors and textures, so traditional foods would look somewhat different when prepared from SPK004.
- (C) For successful cultivation of SPK004, a soil significantly richer in nitrogen is needed than is needed for the varieties of sweet potato currently cultivated in the region.
- (D) There are no other varieties of sweet potato that are significantly richer in betacarotene than SPK004 is.
- (E) The currently cultivated varieties of sweet potato contain no important nutrients that SPK004 lacks.

127. No nation in the world has experienced as significant a decline in its Yucaipa tree population as our nation. Yet only our nation imposes a law prohibiting the use of Yucaipa tree-bark oil in cosmetics. The purpose of this law in the first place was to help maintain the Yucaipa tree population, at least in this nation. But the law is clearly unnecessary and therefore should be repealed.

Which of the following, if true, would most seriously weaken the conclusion drawn in the passage?

- (A) This nation contains more Yucaipa trees than any other nation.
- (B) Yucaipa tree-bark oil is not used for any consumer goods other than cosmetics.
- (C) The demand for cosmetics containing Yucaipa tree-bark oil is expected to decline in the future in other nations while continuing unabated in this nation.
- (D) In other countries, labor used to harvest Yucaipa trees for cosmetics is less expensive than comparable labor in this nation.
- (E) In this nation, some wild animals eat Yucaipa tree bark, thereby contributing to their destruction.
- **128.** Vitamin XYZ has long been a favorite among health food enthusiasts. In a recent large study, those who took large amounts of vitamin XYZ daily for two years showed on average a 40 percent lower risk of heart disease than did members of a control group. Researchers corrected for differences in relevant health habits, such as diet. **Which one of the following inference is most supported by the passage?**
 - (A) Taking large amount of vitamins is probably worth risking the side effects.
 - (B) Those who take large doses of vitamin XYZ daily for the next two years will exhibit on average an increase in the likelihood of avoiding heart disease.
 - (C) Li, who has taken large amounts of vitamin XYZ daily for the past two years, has a 40 percent lower risk.
 - (D) Taking large amounts of vitamin XYZ daily over the course of one's adult life should be recommended to most adults.
 - (E) Health food enthusiasts are probably correct in believing that large daily doses of multiple vitamins promote good health.

129. Outsourcing is the practice of obtaining from an independent supplier a product or service that a company has previously provided for itself. Vernon, Inc., a small manufacturing company that has in recent years experienced a decline in its profits, plans to boost its profits by outsourcing those parts of its business that independent suppliers can provide at lower cost than Vernon can itself.

Which of the following, if true, most strongly supports the prediction that Vernon's plan will achieve its goal?

- (A) Among the parts of its business that Vernon does not plan to outsource are some that require standards of accuracy too high for most independent suppliers to provide at lower cost than Vernon can.
- (B) Vernon itself acts as an independent supplier of specialized hardware items to certain manufacturers that formerly made those items themselves.
- (C) Relatively few manufacturers that start as independent suppliers have been able to expand their business and become direct competitors of the companies they once supplied.
- (D) Vernon plans to select the independent suppliers it will use on the basis of submitted bids.
- (E) Attending to certain tasks that Vernon performs relatively inefficiently has taken up much of the time and effort of top managers whose time would have been better spent attending to Vernon's core business.
- 130. Industrialists from the country Distopia were accused of promoting the Distopian intervention in the Arcadian civil war merely to ensure that the industrialists' facilities in Arcadia made substantial profits during the war. Yet this cannot be the motive since, as the Distopians foresaw, Distopia's federal expenses for the intervention were eight billion dollars, whereas, during the war, profits from the Distopian industrialists' facilities in Arcadia totaled only four billion dollars.

Which of the following, if true, exposes a serious flaw in the argument made in the second sentence above?

- (A) During the Arcadian war, many Distopian industrialists with facilities located in Arcadia experienced a significant rise in productivity in their facilities located in Distopia.
- (B) The largest proportion of Distopia's federal expenses is borne by those who receive no significant industrial profits.
- (C) Most Distopian industrialists' facilities located in Arcadia are expected to maintain the level of profits they achieved during the war.
- (D) Distopian industrialists' facilities in Arcadia made substantial profits before the events that triggered the civil war.
- (E) Many Distopians expressed concern over the suffering that Arcadians underwent during the civil war.

131. Archaeologists in Michigan have excavated a Native American camp near Dumaw Creek. Radiocarbon dating of animal bones found at the site indicates that the camp dates from some time between 1605 and 1755. However, the camp probably dates to no later than 1630, since no European trade goods were found at the site, and European traders were active in the region from the 1620's onward.

Which of the following, if true, most strengthens the argument?

- A. Due to trade among Native Americans, some European trade goods would have reached the area before the European traders themselves did.
- B. At all camps in the region that have been reliably dated to the late 1620's, remains of European trade goods have been found.
- C. The first European trade goods to reach the area would have been considered especially valuable and preserved as much as possible from loss or destruction.
- D. The first European traders in the area followed soon after the first European explorers.
- E. The site is that of a temporary camp that would have been used seasonally for a few years and then abandoned.
- 132. For years the beautiful Renaissance buildings in Palitito have been damaged by exhaust from many tour buses that come to the city. There has been little parking space, so most buses have idled at the curb during each stop on their tour, and idling produces as much exhaust as driving. The city has now provides parking that accommodates a third of the tour buses, so damage to Palitito's buildings from the buses' exhaust will diminish significantly.

Which of the following, if true, most strongly supports the argument?

- A) The exhaust from Palitito's few automobiles is not a significant threat to Palitito's buildings.
- B) Palitito's Renaissance buildings are not threatened by pollution other than engine exhaust.
- C) Tour buses typically spend less than one-quarter of the time they are in Palitito transporting passengers from one site to another.
- D) Most tourists come to Palitito by tour bus than by any other single means of transportation.
- E) Some of the tour buses that are unable to find parking drive around Palitito while their passengers are visiting a site.

133. Demographers doing research for an international economics newsletter claim that the average per capita income in the country of Kuptala is substantially lower than that in the country of Bahlton. They also claim, however, that whereas poverty is relatively rare in Kuptala, over half the population of Bahlton lives in extreme poverty. At least one of the demographers' claims must, therefore, be wrong.

The argument above is most vulnerable to which of the following criticisms?

- (A) It rejects an empirical claim about the average per capita incomes in the two countries without making any attempt to discredit that claim by offering additional economic evidence.
- (B) It treats the vague term "poverty" as though it had a precise and universally accepted meaning.
- (C) It overlooks the possibility that the number of people in the two countries who live in poverty could be the same even though the percentages of the two populations that live in poverty differ markedly.
- (D) It fails to show that wealth and poverty have the same social significance in Kuptala as in Bahlton.
- (E) It does not consider the possibility that incomes in Kuptala, unlike those in Bahlton, might all be very close to the country's average per capita income.
- 134. Either Perry's faction or Tucker's faction, but not both, will win control of the government. If Perry's faction wins, the nation will suffer economically. If Tucker's faction wins, the nation will suffer militarily.

Given the statements in the passage, which one of the following statements must be true?

- (A) It is possible, but not certain, that the nation will neither suffer economically nor suffer militarily.
- (B) If the nation suffers economically, it is certain that Perry's faction has won control of the government.
- (C) It is certain that the nation will suffer either economically or militarily, and also certain that it will not suffer both.
- (D) If the nation suffers militarily, it is possible, but not certain, that Tucker's faction has won control of the government.
- (E) If the nation suffers both economically and militarily, it is certain that neither Perry's faction nor Tucker's has won control of the government.

135. Although fullerenes - spherical molecules made entirely of carbon - were first found in the laboratory, they have since been found in nature, formed in fissures of the rare mineral shungite. Since laboratory synthesis of fullerenes requires distinctive conditions of temperature and pressure, this discovery should give geologists a test case for evaluating hypothesis about the state of the Earth's crust at the time these naturally occurring fullerenes were formed.

Which of the following, if true, most seriously undermines the argument?

- A) Confirming that the shungite genuinely contained fullerenes took careful experimentation
- B) Some fullerenes have also been found on the remains of a small meteorite that collided with a spacecraft.
- C) The mineral shungite itself contains large amounts of carbon, from which the fullerenes apparently formed.
- D) The naturally occurring fullerenes are arranged in a previously unknown crystalline structure
- E) Shungite itself is formed only under distinctive conditions.
- 136. **FILM DIRECTOR**: It is true that certain characters and plot twists in my newly released film THE BIG HEIST are strikingly similar to characters and plot twists in Thieves, a movie that came out last year. Based on these similarities, the film studio that produced Thieves is now accusing me of taking ideas from that film. The accusation is clearly without merit. All production work on the BIG HEIST was actually completed months before THIEVES was released.

Which of the following, if true, provides the strongest support for the director's rejection of the accusation?

- A. Before thieves began production, its script had been circulating for several years among various film studio, including the studio that produced The Big Heist
- B. The characters and plot twists that are most similar in the two films have close parallels in many earlier films of the same genre
- C. The film studio that produced Thieves seldom produces film in this genre
- D. The director of Thieves worked with the director of the Big Heist on several earlier projects
- E. The time it took to produce THE BIG HEIST was considerably shorter than the time it took to produce Thieves

137. **Sonya**: The government of Copeland is raising the cigarette tax. Copeland's cigarette prices will still be reasonably low, so cigarette consumption will probably not be affected much. Consequently, government revenue from the tax will increase.

Raoul: True, smoking is unlikely to decrease, because Copeland's cigarette prices will still not be high. They will, however, no longer be the lowest in the region, so we might begin to see substantial illegal sales of smuggled cigarettes in Copeland.

Raoul responds to Sonya's argument by doing which of the following?

- A. Questioning the support for Sonya's conclusion by distinguishing carefully between No change and no decrease
- B. calling Sonya's conclusion into question by pointing to a possible effect of a certain change.
- C. Arguing that Sonya's conclusion would be better supported if Sonya could cite a precedent for what she predicts will happen.
- D. showing that a cause that Sonya claims will be producing a certain effect is not the only cause that could produce that effect
- E. pointing out that a certain initiative is not bold enough to have the effects she predicts it will have
- 138. Tiger sharks are common in waters surrounding Tenare Island. Usually tiger sharks feed on smaller sharks, but sometimes they have attacked tourists swimming and surfing at Tenare's beaches. This has hurt Tenare's tourism industry, which is second only to its fishing industry in annual revenues. In order to help the economy, therefore, the mayor of the island has proposed an ongoing program to kill any tiger sharks within a mile of the beaches.

Which of the following, if true, most strongly calls into question the likelihood that implementation of the mayor's proposal will have the desired consequence?

- A. Even if not all tiger sharks that come close to the beaches are killed, the existence of the program would reassure tourists.
- B. Business owners who depend on tourism are willing to pay most of the cost of implementing the program.
- C. Tourists come to Tenare Island for its beaches, even though the island features a number of other tourist attractions.
- D. The small sharks on which tiger sharks prey feed on fish that are commercially important to the island's fisheries.
- E. Not all tourists who come to Tenare Island enjoy swimming or surfing.

139. The imposition of quotas limiting imported steel will not help the big American steel mills. In fact, the quotas will help "mini-mills" flourish in the United States. Those small domestic mills will take more business from the big American steel mills than would have been taken by the foreign steel mills in the absence of quotas.

Which of the following, if true, would cast the most serious doubt on the claim made in the last sentence above?

- A. Quality rather than price is a major factor in determining the type of steel to be used for a particular application
- B. Foreign steel mills have long produced grades of steel comparable in quality to the steel produced by the big American mills
- C. American quotas on imported goods have often induced other countries to impose similar quotas on American goods.
- D. Domestic "mini-mills" consistently produce better grades of steel than do the big American mills
- E. Domestic "mini-mills" produce low-volume specialized types of steel that are not produced by the big American steel mills
- 140. For several years, per capita expenditure on prescription drugs in Voronia rose by fifteen percent or more annually. In order to curb these dramatic increases, the ministry of health prohibited drug manufacturers from raising any of their products' prices. Even though use of prescription drugs did not expand after this price freeze, per capita expenditure for prescription drugs continued to increase by a substantial percentage each year.

Which of the following, if true, most helps to explain why the ministry's action did not achieve its goal?

- (A) After price increases were prohibited, drug manufacturers concentrated on producing new medications to replace existing products.
- (B) The population of Voronia rose steadily throughout the period.
- (C) Improvements in manufacturing processes enabled drug manufacturers to maintain high profit levels on drugs despite the price freeze.
- (D) In addition to imposing a price freeze, the government encouraged doctors to prescribe generic versions of common drugs instead of the more expensive brandname versions.
- (E) After price increases were prohibited, some foreign manufacturers of expensive drugs ceased marketing them in Voronia.

141. Which if the following most logically completes the argument?

- A. some United States manufacturers have been substantially increasing their output over the last several years.
- B. the efficiency of solar-power generators in converting energy from the Sun into electric power is not improving as fast as it once did
- C. Just as European manufacturers enjoy certain advantages in Europe, so do United States manufacturers in the United States.
- D. European government are currently undertaking initiatives to stimulate the use of solar power within Europe
- E. the current market for solar-power generators in the United States is very limited.
- 142. **Editorial**: Regulations recently imposed by the government of Risemia call for unprecedented reductions in the amounts of pollutants manufacturers are allowed to discharge into the environment. It will take costly new pollution control equipment requiring expensive maintenance to comply with these regulations. Resultant price increases for Risemian manufactured goods will lead to the loss of some export markets. Clearly therefore, annual exports of Risemian manufactured goods will in the future occur at diminished levels.

Which of the following, if true, most seriously weakens the argument in the editorial?

- A. the need to comply with the new regulations will stimulate the development within Risemia of new pollution control equipment for which a strong worldwide demand is likely to emerge.
- B. the proposed regulations include a schedule of fines for noncompliance that escalate steeply in cases of repeated noncompliance.
- C. Savings from utilizing the chemicals captured by the pollution control equipment will remain far below the cost of maintaining the equipment.
- D. By international standards, the levels of pollutants currently emitted by some of Risemia's manufacturing plants are not considered excessive.
- E. The stockholders of most of Risemia's manufacturing corporations exert substantial pressure on the corporations to comply with environmental laws.

143. On pacific islands, a newly arrived gecko species, the house gecko, is displacing the previously established mourning gecko in urban areas, but populations of the two species are more stable in rural areas far from human settlement. The house gecko does not attack the mourning gecko, but in areas where insects congregate it prevents the mourning gecko from feeding on them.

Which of the following contributes the most to an explanation of the difference between gecko populations in urban and rural areas?

- A. in urban areas, geckos are valued because they eat so many insects.
- B. geckos defend territories against other members of the same species.
- C. house geckos that arrive on islands are carried there in boats and planes.
- D. in places where there are lighted buildings, insects tend to gather around the light.
- E. mourning geckos are all female and reproduce asexually, but house geckos reproduce sexually.
- 144. At present the Hollywood Restaurant has only standard-height tables. However, many customers come to watch the celebrities who frequent the Hollywood, and they would prefer tall tables with stools because such seating would afford a better view of the celebrities. Moreover, diners seated on stools typically do not stay as long as diners seated at standard-height tables. Therefore, if the Hollywood Restaurant replaced some of its seating with high tables and stools, its profits would increase.

The argument is vulnerable to criticism on the grounds that it gives reason to believe that it is likely that

- A. some celebrities come to the Hollywood to be seen, and so might choose to sit at the tall tables if they were available
- B. the price of meals ordered by celebrities dining at the Hollywood compensates for the longer item, if any, they spend lingering over their meals
- C. a customer of the Hollywood who would choose to sit at a tall table would be an exception to the generalization about lingering
- D. a restaurant's customers who spend less time at their meals typically order less expensive meals than those who remain at their meals longer
- E. with enough tall tables to accommodate all of the Hollywood's customers interested in such seating, there would be no view except of other tall tables

145. Some airlines allegedly reduce fares on certain routes to a level at which they lose money, in order to drive competitors off those routes. However, this method of eliminating competition cannot be profitable in the long run. Once an airline successfully implements this method, any attempt to recoup the earlier losses by charging high fares on that route for an extended period would only provide competitors with a better opportunity to undercut the airline's fares.

Which of the following, if true, most seriously weakens the argument?

- A. in some countries it is not illegal for a company to drive away competitors by selling a product below cost
- B. airline execs generally believe that a company that once underpriced its fares to drive away competitors is very likely to do so again if new competitors emerge
- C. as part of promotions designed to attract new customers, airlines sometimes reduce their ticket prices to below an economically sustainable level.
- D. on deciding to stop serving particular routes, most airlines shift resources to other routes rather than reduce the size of their operations.
- E. when airlines dramatically reduce their fares on a particular route, the total number of air passengers on that route increases greatly.
- 146. Herbicides allow cereal crops to be grown very efficiently, with virtually no competition from weeds. In Britain, partridge populations have been steadily decreasing since herbicides use became widespread. Some environmentalists claim that these birds, which live in and around the cereal crops fields, are being poisoned by the herbicides. However, tests show no more than trace quantities of herbicides in partridges on herbicide-treated land. Therefore, something other than herbicide use must be responsible for the population decrease.

Which of the following if true about Britain most seriously weakens the argument?

- A. The elimination of certain weeds from cereal crop fields has reduced the population of the small insects that live on those weeds and that form a major part of the partridge chick's diet.
- B. Since partridges are valued as game birds, records of their population are more carefully kept than those for many other birds.
- C. Some of the weeds that are eliminated from cereal crop fields by herbicides are much smaller than the crop plants themselves and would have no negative effect on crop yield if they were allowed to grow
- D. Birds other than partridges that live in or around cereal crop fields have also been suffering population declines.
- E. The toxins contained in herb typically used on cereal crops can be readily identified in the tissues of animals that have ingested them.

147. All languages known to have exactly six basic color terms describe the same six colors – black, white, red, green, blue and yellow – corresponding to the primary neural responses revealed in studies of human color perception. In addition, all languages known to have only three basic color terms distinguish among "black," "white," and "red." This evidence shows that the way in which the mind recognizes differences among colored objects is not influenced by culture.

Which of the following, if true, most seriously weakens the argument above?

- A. While languages differ in their number of basic color terms, no language has been conclusively determined to have more than eleven such terms.
- B. Every language contains mechanisms by which speakers who perceive subtle differences in hue can describe those differences.
- C. Among cultures employing only three color terms, the word "red" typically encompasses not only objects that would be called red in English but also those that would be called yellow.
- D. Several languages, such as Vietnamese and Pashto, use a single term to mean both blue and green, but speakers of such languages commonly refer to tree leaves or the sky to resolve ambiguous utterances.
- E. In a study of native speakers of Tarahumara, a language that does not distinguish between blue and green, respondents were less able to identify distinctions among blue and green chips than native speakers of Spanish, which does distinguish between blue and green.
- 148. In 2000, Gregory's Grocery had a total of 50 stores in the United States and reported profits of \$50 million in 2000. During the next five years, the chain added 20 stores per year for a total of 150 stores in the United States and Canada in 2005. Profits increased each year at a rate of 10 percent.

Which of the following can be concluded based on the passage above?

- A. The stores in Canada were not as profitable as those in the United States.
- B. Between 2000 and 2005, average revenue per store decreased.
- C. On average, the stores were less profitable in 2005 than in 2000.
- D. Profit per store, or average profit, will continue to decrease if the chain continues to expand the number of stores.
- E. If Gregory's Grocery shuts down some of its stores, average profitability will increase.

149. Serious individual art collectors are usually discreet when making significant purchases or sales related to their collections. At art auctions, for example, these collectors often place anonymous bids for major artwork. Therefore, the whereabouts of most of the world's most valuable artwork is probably unknown.

Each of the following, if true, would weaken the conclusion above EXCEPT:

- A. The value of a piece of art is purely subjective.
- B. Serious art collectors usually publicize their new artwork several months after making a purchase.
- C. Museums own the vast majority of the world's most valuable artwork.
- D. Of all the individuals in the world who own extremely valuable artwork, only a few are considered serious art collectors.
- E. The private collections of most serious individual art collectors are often displayed in public settings.
- 150. In a recent poll, 71% of respondents reported that they cast votes in the most recent national election. Voting records show, however, that only 60% of eligible voters actually voted in that election.

Which of the following pieces of evidence, if true, would provide the best explanation for the apparent discrepancy?

- A. The margin of error for the survey was plus or minus five three percentage points.
- B. Fifteen percent of the survey's respondents were living overseas at the time of the election.
- C. Prior research has shown that that people who actually do vote are also more likely to respond to polls than those who do not vote.
- D. Many people who intend to vote are prevented from doing so by last-minute conflicts on election day or other complications.
- E. Some people confused the national election with other recent elections when responding to the poll.