

CR Mixed-bag part 1

1. D
2. C
3. E
4. E
5. D
6. E
7. B
8. C
9. B
10. E
11. D
12. E
13. C
14. E
15. E
16. A
17. D
18. E
19. E
20. C
21. D
22. A
23. C
24. C
25. B
26. B
27. C
28. D
29. E
30. A
31. B
32. E
33. C
34. A
35. C
36. E
37. D
38. C
39. C
40. A
41. D
42. A
43. B
44. D
45. B
46. B
47. E
48. A
49. D
50. D
51. C

- 52. C
- 53. C
- 54. B
- 55. D
- 56. D
- 57. A
- 58. B
- 59. B
- 60. D
- 61. B
- 62. C
- 63. B
- 64. E
- 65. E
- 66. E
- 67. D
- 68. D
- 69. B
- 70. E
- 71. A
- 72. B

CR Mixed-bag Part 2

- 1. D
- 2. C
- 3. E
- 4. A
- 5. A
- 6. E
- 7. D
- 8. B
- 9. E
- 10. E
- 11. A
- 12. D
- 13. C
- 14. D
- 15. B
- 16. B
- 17. C
- 18. A
- 19. C
- 20. B
- 21. B
- 22. A
- 23. C
- 24. E
- 25. C
- 26. C
- 27. A
- 28. C

- 29. B
- 30. E
- 31. C
- 32. A
- 33. B
- 34. B
- 35. E
- 36. B
- 37. C
- 38. A
- 39. E
- 40. B
- 41. D
- 42. A
- 43. D
- 44. B
- 45. D
- 46. A
- 47. E
- 48. D
- 49. E
- 50. C
- 51. D
- 52. B
- 53. A
- 54. B
- 55. A
- 56. E
- 57. A
- 58. E
- 59. B
- 60. C
- 61. B
- 62. B
- 63. E
- 64. A
- 65. A
- 66. B
- 67. C
- 68. E

Answer-key

Assumptions Latest

- 1. D
- 2. D
- 3. C
- 4. C
- 5. C

6. A
7. A
8. E
9. C
10. A
11. C
12. D
13. A
14. A
15. D
16. C
17. D
18. A
19. C
20. E
21. E
22. E
23. A
24. C
25. E
26. C
27. E
28. D
29. D
30. B
31. A
32. C
33. A
34. B
35. E
36. D
37. C
38. A
39. E
40. E

Boldface – Latest

41. B
42. E
43. D
44. C
45. D
46. D
47. B
48. B

- 49. B
- 50. B
- 51. B
- 52. C
- 53. B
- 54. A
- 55. A
- 56. E
- 57. D
- 58. D
- 59. B
- 60. A
- 61. C
- 62. D
- 63. D
- 64. E
- 65. D
- 66. C
- 67. D
- 68. C
- 69. A
- 70. C

Evaluate – Latest

- 71. E
- 72. C
- 73. E
- 74. C
- 75. A
- 76. E
- 77. A
- 78. C
- 79. C
- 80. C
- 81. E
- 82. A
- 83. D
- 84. E
- 85. C
- 86. B
- 87. D
- 88. C
- 89. D
- 90. A
- 91. C

- 92. D
- 93. A
- 94. D

Miscellaneous – Latest

- 95. A
- 96. D
- 97. D
- 98. E
- 99. C
- 100. B
- 101. E
- 102. C
- 103. D
- 104. D
- 105. A
- 106. A
- 107. A
- 108. E
- 109. A
- 110. B
- 111. A
- 112. D
- 113. B
- 114. A
- 115. C
- 116. B
- 117. B
- 118. C
- 119. B
- 120. A
- 121. A
- 122. E
- 123. D
- 124. E
- 125. B
- 126. D
- 127. E
- 128. B

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 diatonic 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.

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

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 soybeans
- 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.

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

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 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

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.

15. Which of 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

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 warblers 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 county.

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.

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

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

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

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.

35. 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 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.

49. Which of the following most logically completes the reasoning?

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

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

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.
60. 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.

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

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.

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

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. Qualitex 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 black 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 from 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.

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

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.

91. Which of the flowing most logically completes the argument?

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.

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

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.

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

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 forced 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 beta-carotene 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 beta-carotene 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 brand-name 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?

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 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 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 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.