### **GMAT CRITICAL REASONING SAMPLE QUESTIONS**

Instruction: This file contains 205 sample questions on GMAT Critical Reasoning and explanations for 25 of them. For answers with complete explanations to other 180 questions, please order the <u>Complete GMAT Prep Course</u> which includes <u>Verbal Study</u> <u>Guide</u>, <u>Essay Prep Course</u>, and <u>Math Review</u>.

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

In a survey of job applicants, two-fifths admitted to being at least a little dishonest. However, the survey may underestimate the proportion of job applicants who are dishonest, because\_\_\_\_\_.

- A. some dishonest people taking the survey might have claimed on the survey to be honest
- B. some generally honest people taking the survey might have claimed on the survey to be dishonest
- C. some people who claimed on the survey to be at least a little dishonest may be very dishonest
- D. some people who claimed on the survey to be dishonest may have been answering honestly
- E. some people who are not job applicants are probably at least a little dishonest

### Answer with explanation:

A is the best answer.

If applicants who are in fact dishonest claimed to be honest, the survey results would show a smaller proportion of dishonest applicants than actually exists. Therefore, this choice is the best answer. B is inappropriate because generally honest applicants who claimed to be dishonest could contribute to the overestimation, but not to the underestimation, of dishonest applicants. D is inappropriate because applicants who admitted their dishonesty would not contribute to an underestimation of the proportion of dishonest applicants. C and E are inappropriate because the argument is concerned neither with degrees of dishonesty nor with the honesty of non-applicants.

2. The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana.

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

- A. Insurance company statisticians do not believe that moving to Hawaii will significantly lengthen the average Louisianan's life.
- B. The governor of Louisiana has falsely alleged that statistics for his state are inaccurate.
- C. The longevity ascribed to Hawaii's current population is attributable mostly to genetically determined factors.
- D. Thirty percent of all Louisianans can expect to live longer than 77 years.

E. Most of the Hawaiian Islands have levels of air pollution well below the national average for the United States.

#### Answer with explanation:

C is the best answer.

This choice suggests that a significant proportion of Hawaii's population is genetically predisposed to be long lived. Since Louisianans are not necessarily so predisposed, and since the Louisianans' children will acquire their genetic characteristics from their parents, not from their birthplace, this choice presents a reason to doubt that Hawaiian born children of native Louisianans will have an increased life expectancy. Therefore, this choice is the best answer. Because the conclusion concerns people born in Hawaii, not the average Louisianan, A does not weaken the conclusion. Because the governor's allegation is false, it cannot affect the conclusion. D fails to weaken the conclusion because it is consistent with the information given and the conclusion about life expectancy. By suggesting that Hawaii's environment is in one respect particularly healthy, E supports the conclusion.

3. The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana.

Which of the following statements, if true, would most significantly strengthen the conclusion drawn in the passage?

- A. As population density increases in Hawaii, life expectancy figures for that state are likely to be revised downward.
- B. Environmental factors tending to favor longevity are abundant in Hawaii and less numerous in Louisiana.
- C. Twenty-five percent of all Louisianans who move to Hawaii live longer than 77 years.
- D. Over the last decade, average life expectancy has risen at a higher rate for Louisianans than for Hawaiians.
- E. Studies show that the average life expectancy for Hawaiians who move permanently to Louisiana is roughly equal to that of Hawaiians who remain in Hawaii.

#### Answer with explanation:

If B is true, the greater abundance of longevity-promoting environmental factors it mentions is probably at least partly responsible for the higher life expectancy in Hawaii. Children born in Hawaii benefit from these factors from birth, and thus Louisianans who have children in Hawaii increase their children's chances of living longer. Therefore, B is the best answer. If life expectancy in Hawaii is likely to be falling, as A says, the argument is weakened rather than strengthened. C and E, in the absence of other relevant information, have no bearing on the conclusion; thus, they are inappropriate. D is irrelevant, because the information it mentions about rates would already have been incorporated into the statistics cited in the passage. 4. Insurance Company X is considering issuing a new policy to cover services required by elderly people who suffer from diseases that afflict the elderly. Premiums for the policy must be low enough to attract customers. Therefore, Company X is concerned that the income from the policies would not be sufficient to pay for the claims that would be made.

Which of the following strategies would be most likely to minimize Company X's losses on the policies?

- A. Attracting middle-aged customers unlikely to submit claims for benefits for many years.
- B. Insuring only those individuals who did not suffer any serious diseases as children
- C. Including a greater number of services in the policy than are included in other policies of lower cost
- D. Insuring only those individuals who were rejected by other companies for similar policies
- E. Insuring only those individuals who are wealthy enough to pay for the medical services

## Answer with explanation:

Insurance companies can improve the ratio of revenues to claims paid, thus minimizing losses, if they insure as many people belonging to low-risk groups as they can. Because the strategy described in A adds a low-risk group to the pool of policyholders, this choice is the best answer. B is irrelevant, since no link is established between childhood diseases and diseases affecting the elderly. C is inappropriate, since increasing the number of services covered is unlikely to minimize losses. D is inappropriate, since it would increase the likelihood that claims against the policy will be made. Because policyholders will file claims against the policy for services covered rather than pay for the cost of the services themselves, E is irrelevant.

5. A program instituted in a particular state allows parents to prepay their children's future college tuition at current rates. The program then pays the tuition annually for the child at any of the state's public colleges in which the child enrolls. Parents should participate in the program as a means of decreasing the cost for their children's college education.

Which of the following, if true, is the most appropriate reason for parents NOT to participate in the program?

- A. the parents are unsure about which public college in the state the child will attend.
- B. The amount of money accumulated by putting the prepayment funds in an interest-bearing account today will be greater than the total cost of tuition for any of the public colleges when the child enrolls.
- C. The annual cost of tuition at the state's public colleges is expected to increase at a faster rate than the annual increase in the cost of living.
- D. Some of the state's public colleges are contemplating large increases in tuition next year.
- E. The prepayment plan would not cover the cost of room and board at any of the state's public colleges.

## Answer with explanation:

The passage recommends that parents participate in a tuition prepayment program as a means of decreasing the cost of their children's future college education. If B is true, placing the funds in an interest bearing account would be more cost-effective than participating in the prepayment program. Therefore, B would be a reason for NOT participating and is the best

answer. A is not clearly relevant to deciding whether to participate since the program applies to whatever public college the child might attend. C and D, by stating that tuition will increase, provide support for participating in the program. E is not clearly relevant to deciding whether to participate, since the expenses mentioned fall outside the scope of the program.

6. Company Alpha buys free-travel coupons from people who are awarded the coupons by Bravo Airlines for flying frequently on Bravo airplanes. The coupons are sold to people who pay les for the coupons than they would pay by purchasing tickets from Bravo. This making of coupons results in lost revenue for Bravo.

To discourage the buying and selling of free-travel coupons, it would be best for Bravo Airlines to restrict the

- A. number of coupons that a person can be awarded in a particular year
- B. use of the coupons to those who were awarded the coupons and members of their immediate families
- C. days that the coupons can be used to Monday through Friday
- D. amount of time that the coupons can be used after they are issued
- E. number of routes on which travelers can use the coupons

## Answer with explanation:

Restricting use of the coupons to the immediate families of those awarded them, as B suggests, would make the coupons valueless for anyone else, so that marketing the coupons would no longer be possible. The coupons, however, would still allow the people to whom Bravo gives them to enjoy free travel. Thus, awarding coupons would remain a strong incentive to frequent travel on Bravo. Therefore, B is the best answer. A would do nothing to reduce the resale value of the coupons. C, D and E all not only fail to prevent Alpha's coupon sales from competing with Bravo's own ticket sales, but also potentially reduce the usefulness of the coupons to the people to whom they are awarded.

7. The ice on the front windshield of the car had formed when moisture condensed during the night. The ice melted quickly after the car was warmed up the next morning because the defrosting vent, which blows on the front windshield, was turned on full force.

Which of the following, if true, most seriously jeopardizes the validity of the explanation for the speed with which the ice melted?

- A. The side windows had no ice condensation on them
- B. Even though no attempt was made to defrost the back window, the ice there melted at the same rate as did the ice on the front windshield.
- C. The speed at which ice on a window melts increases as the temperature of the air blown on the window increases
- D. The warm air from the defrosting vent for the front windshield cools rapidly as it dissipates throughout the rest of the car.
- E. The defrosting vent operates efficiently even when the heater, which blows warm air toward the feet or faces of the driver and passengers, is on.

## Answer with explanation:

The speed with which the ice on the windshield melted is attributed to the air blowing full force from the defrosting vent onto the front windshield. This explanation of B is undermined if, as B states, no attempt was made to defrost the back window and the ice on the back window melted as quickly as did the ice on the windshield. Therefore, B is the best answer. In the absence of other information, the lack of ice condensation on the side windows that is mentioned in A is irrelevant to the validity of the explanation. C might support the explanation, since the air from the defrosting vent was warm. Neither of D and E gives a reason to doubt that air from the vent caused the ice's melting, and thus neither jeopardizes the explanation's validity.

8. To prevent some conflicts of interest, Congress could prohibit high-level government officials from accepting positions as lobbyists for three years after such officials leave government service. One such official concluded, however, that such a prohibition would be unfortunate because it would prevent high-level government officials from earning a livelihood for three years.

The official's conclusion logically depends on which of the following assumptions?

- A. Laws should not restrict the behavior of former government officials.
- B. Lobbyists are typically people who have previously been high-level government officials.
- C. Low-level government officials do not often become lobbyists when they leave government service.
- D. High-level government officials who leave government service are capable of earning a livelihood only as lobbyists.
- E. High-level government officials who leave government service are currently permitted to act as lobbyists for only three years.

#### Answer with explanation:

The official argues that prohibiting high-level government officials from accepting positions as lobbyists for three years would prevent the officials from earning a livelihood for that period. The reasoning tacitly excludes the possibility of such officials earning a living through work other than lobbying. Therefore, D, which expresses this tacit assumption, is the best answer. The official's argument does not depend on the assumption in A, since the argument would not be invalidated if some restrictions on the behavior of government officials were desirable. The official's argument does not depend on the assumption in B, since the argument would not be invalidated if lobbyists were not typically former high-level government officials. The official's argument does not depend on the assumption in C, since the argument would not be invalidated if former low-level government officials did often become lobbyists. The official's argument does not depend on the assumption in E, since the argument would not be invalidated if former low-level government officials could act as lobbyists indefinitely.

9. A conservation group in the United States is trying to change the long-standing image of bats as frightening creatures. The group contends that bats are feared and persecuted solely because they are shy animals that are active only at night.

Which of the following, if true, would cast the most serious doubt on the accuracy of the group's contention?

- A. Bats are steadily losing natural roosting places such as caves and hollow trees and are thus turning to more developed areas for roosting.
- B. Bats are the chief consumers of nocturnal insects and thus can help make their hunting territory more pleasant for humans.
- C. Bats are regarded as frightening creatures not only in the United States but also in Europe, Africa, and South America.
- D. Raccoons and owls are shy and active only at night; yet they are not generally feared and persecuted.
- E. People know more about the behavior of other greatly feared animal species, such as lions, alligators, and greatly feared animal species, such as lions, alligators, and snakes, than they do about the behavior of bats.

## Answer with explanation:

The group's contention suggests that animals that are shy and active at night are feared and persecute for that reason. D establishes that raccoons and owls are shy and active at night, but that they are neither feared nor persecuted. Therefore, D is the best answer. Although an increasing prevalence of bats might explain the importance of addressing people's fear of bats, A does not address the original causes of that fear. B and E, while relevant to the rationality of people's fear of bats, do not affect the assessment of the accuracy of the group's contention. That bats are feared outside the United States, as C states, does not conflict with the group's explanation for fear of bats in the United States.

10. Meteorite explosions in the Earth's atmosphere as large as the one that destroyed forests in Siberia, with approximately the force of a twelve-megaton nuclear blast, occur about once a century.

The response of highly automated systems controlled by complex computer programs to unexpected circumstances is unpredictable.

Which of the following conclusions can most properly be drawn, if the statements above are true, about a highly automated nuclear-missile defense system controlled by a complex computer program?

- A. Within a century after its construction, the system would react inappropriately and might accidentally start a nuclear war.
- B. The system would be destroyed if an explosion of a large meteorite occurred in the Earth's atmosphere.
- C. It would be impossible for the system to distinguish the explosion of a large meteorite from the explosion of a nuclear weapon.
- D. Whether the system would respond inappropriately to the explosion of a large meteorite would depend on the location of the blast.
- E. It is not certain what the system's response to the explosion of a large meteorite would be, if its designers did not plan for such a contingency.

## Answer with explanation:

If the defense system designers did not plan for the contingency of large meteorite explosions, such explosions would, from the system's perspective, be unexpected. The system's response

to such explosions is consequently unpredictable. E expresses this inference and is thus the best answer. A cannot be inferred since it is consistent with the stated information that no meteorite explosion will occur within a century. B cannot be inferred since there is no information to suggest that meteorite explosions in the atmosphere would destroy the system. C cannot be inferred since it is consistent with the stated information that an appropriately designed nuclear defense system might be able to distinguish nuclear from meteorite explosions. D cannot be inferred since there is no information to suggest that the location of blasts would determine the appropriateness of defense system's response.

11. The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions.

If the statements in the passage are true, which of the following must be true?

- A. Some lawyers who now advertise will charge more for specific services if they do not have to specify fee arrangements in the advertisements.
- B. More consumers will use legal services if there are fewer restrictions on the advertising of legal service.
- C. If the restriction against advertisements that do not specify fee arrangements is removed, more lawyers will advertise their services.
- D. If more lawyers advertise lower prices for specific services, some lawyers who do not advertise will also charge less than they currently charge for those services.
- E. If the only restrictions on the advertising of legal services were those that apply to every type of advertising, most lawyers would advertise their services.

#### Answer with explanation:

The supposition in c involves reducing by one the number of restrictions on the advertising of legal services. Any such reduction will, if the stated correlation exists, be accompanied by an increase in the number of lawyers advertising their services, as C predicts. Therefore, C is the best answer. A does not follow from the stated information since it is still possible that no lawyers would raise their fees. B does not follow from the stated information since it is still possible that there would be no increase in the number of consumers using legal services. D does not follow the stated information since it is still possible that none of the lawyers who do not advertise would decide to lower their prices. E does not follow the stated information since it is still possible that few lawyers would advertise their legal services.

12. The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions.

Which of the following, if true, would most seriously weaken the argument concerning overall consumer legal costs?

- A. The state has recently removed some other restrictions that had limited the advertising of legal services.
- B. The state is unlikely to remove all of the restrictions that apply solely to the advertising of legal services.
- C. Lawyers who do not advertise generally provide legal services of the same quality as those provided by lawyers who do advertise.
- D. Most lawyers who now specify fee arrangements in their advertisements would continue to do so even if the specification were not required.
- E. Most lawyers who advertise specific services do not lower their fees for those services when they begin to advertise.

### Answer with explanation:

If E is true, the lawyers who begin advertising when the restriction is removed might all be among those who do not lower their fees on beginning to advertise, in which case no decrease in consumer legal costs will occur. Therefore, E weakens the argument and is the best answer. Since A does not relate the recent removal of restrictions to changes in consumer legal costs, it alone does not weaken the argument. Since the argument is unconcerned with whatever restrictions remain in effect but focuses only on those that will be removed, B does not weaken the argument. C and D are irrelevant to an evaluation of the argument, which is concerned with cost considerations, not with the quality of legal services or the content of lawyers' advertisements.

13. Defense Department analysts worry that the ability of the United States to wage a prolonged war would be seriously endangered if the machine-tool manufacturing base shrinks further. Before the Defense Department publicly connected this security issue with the import quota issue, however, the machine-tool industry raised the national security issue in its petition for import quotas.

Which of the following, if true, contributes most to an explanation of the machine-tool industry's raising the issue above regarding national security?

- A. When the aircraft industries retooled, they provided a large amount of work for too builders.
- B. The Defense Department is only marginally concerned with the effects of foreign competition on the machine-tool industry.
- C. The machine-tool industry encountered difficulty in obtaining governmental protection against imports on grounds other than defense.
- D. A few weapons important for defense consist of parts that do not require extensive machining.
- E. Several federal government programs have been designed which will enable domestic machine-tool manufacturing firms to compete successfully with foreign toolmakers.

#### Answer with explanation:

Since the size of the machine-tool manufacturing base presumably has implications in area beyond national security, one might find it surprising that the industry raised the security issue in its petition. C, the best answer, explains that the industry turned to this issue because others tended to be ineffective in efforts to obtain governmental protection. A explains why the industry might NOT raise the security issue, since it suggests that it might have raised the issue of jobs instead. B explains why the industry might NOT raise the security issue about import quotas, since it suggests that the Defense Department had no interest in import quotas whatsoever. Neither of D and E is relevant to the industry's choice of strategy for securing import quotas.

14. Opponents of laws that require automobile drivers and passengers to wear seat belts argue that in a free society people have the right to take risks as long as the people do not harm other as a result of taking the risks. As a result, they conclude that it should be each person's decision whether or not to wear a seat belt.

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

- A. Many new cars are built with seat belts that automatically fasten when someone sits in the front seat.
- B. Automobile insurance rates for all automobile owners are higher because of the need to pay for the increased injuries or deaths of people not wearing seat belts.
- C. Passengers in airplanes are required to wear seat belts during takeoffs and landings.
- D. The rate of automobile fatalities in states that do not have mandatory seat belt laws is greater than the rate of fatalities in states that do have such laws.
- E. In automobile accidents, a greater number of passengers who do not wear seat belts are injured than are passengers who do wear seat belts.

#### Answer with explanation:

The principle that people are entitled to risk injury provided they do not thereby harm others fails to justify the individual's right to decide not to wear seat belts if it can be shown, as B shows, that that decision does harm others. Therefore, B is the best answer. A suggests that the law may be irrelevant in some cases, but it does not address the issue of the law's legitimacy. C cites a requirement analogous to the one at issue, but its existence alone does not bear on the legitimacy of the one at issue. The argument implicitly concedes that individuals take risks by not wearing seat belts; therefore, D and E, which simply confirm this concession, do not weaken the conclusion.

15. The cost of producing radios in Country Q is ten percent less than the cost of producing radios in Country Y. even after transportation fees and tariff charges are added, it is still cheaper for a company to import radios from Country Q to Country Y than to produce radios in Country Y.

The statements above, if true, best support which of the following assertions?

- A. labor costs in Country Q are ten percent below those in Country Y.
- B. importing radios from Country Q to Country Y will eliminate ten percent of the manufacturing jobs in Country Y.

- C. the tariff on a radio imported from Country Q to Country Y is less than ten percent of the cost of manufacturing the radio in Country Y.
- D. the fee for transporting a radio from Country Q to Country Y is more than ten percent of the cost of manufacturing the radio in Country Q.
- E. it takes ten percent less time to manufacture a radios in Country Q than it does in Country Y.

# Answer with explanation:

If the tariff on importing radios from Country Q to Country Y were as high as ten percent or more of the cost of producing radios in Y, then, contrary to what the passage says, the cost of importing radios from Q to Y would be equal to or more than the cost of producing radios in Y. thus, the tariff cannot be that high, and C is the best answer. A and E give possible partial explanations for the cost difference, but neither is supported by the passage because the cost advantage in Q might be attributable to other factors. B and D are both consistent with the information in the passage, but the passage provides no evidence to support them.

16. During the Second World War, about 375,000 civilians died in the United States and about 408,000 members of the United States armed forces died overseas. On the basis the those figures, it can be concluded that it was not much more dangerous to be overseas in the armed forces during the Second World War than it was to stay at home as a civilian.

Which of the following would reveal most clearly the absurdity of the conclusion drawn above?

- A. Counting deaths among members of the armed forces who served in the United State in addition to deaths among members of the armed forces serving overseas
- B. Expressing the difference between the numbers of deaths among civilians and members of the armed forces as a percentage of the total number of deaths
- C. Separating deaths caused by accidents during service in the armed forces from deaths caused by combat injuries
- D. Comparing death rates per thousand members of each group rather than comparing total numbers of deaths
- E. Comparing deaths caused by accidents in the United States to deaths caused by combat in the armed forces

## Answer with explanation:

Concluding from the similar numbers of deaths in two groups that the relative danger of death was similar for both groups is absurd if, as here, one group was far smaller. D exposes this absurdity by pointing out the need to compare death rates of the two groups, which would reveal the higher death rate for the smaller group. Therefore, D is the best answer. Since the conclusion acknowledges the difference between the number of civilian and armed forces deaths, expressing this difference as a percentage, as suggested by B, is beside the point. A is inappropriate because it simply adds a third group to the two being compared. Because cause of death in not at issue, C and E are irrelevant.

17. Toughened hiring standards have not been the primary cause of the present staffing shortage in public schools. The shortage of teachers is primarily caused by the fact that in

recent years teachers have not experienced any improvements in working conditions and their salaries have not kept pace with salaries in other professions.

Which of the following, if true, would most support the claims above?

- A. Many teachers already in the profession would not have been hired under the new hiring standards.
- B. Today more teachers are entering the profession with a higher educational level than in the past.
- C. Some teachers have cited higher standards for hiring as a reason for the current staffing shortage.
- D. Many teachers have cited low pay and lack of professional freedom as reasons for their leaving the profession.
- E. Many prospective teachers have cited the new hiring standards as a reason for not entering the profession.

### Answer with explanation:

The passage rejects one explanation of the shortage of teachers-that it results from toughened hiring standards-and advances an alternative-that it results from deficiencies in pay and wording conditions. D provides corroborative evidence for the latter explanation by suggesting that, for many former teachers, poor pay and working conditions were reasons for their quitting the profession. Therefore, D is the best answer. A, C and E provide evidence that tends to implicate new hiring standards in the staffing shortage, and thus support the explanation that the passage rejects. B describes what may be a result of the new hiring standards, but it provides no evidence favoring one explanation of the staffing shortage over the other.

18. A proposed ordinance requires the installation in new homes of sprinklers automatically triggered by the presence of a fire. However, a home builder argued that because more than ninety percent of residential fires are extinguished by a household member, residential sprinklers would only marginally decrease property damage caused by residential fires.

Which of the following, if true, would most seriously weaken the home builder's argument?

- A. most individuals have no formal training in how to extinguish fires.
- B. Since new homes are only a tiny percentage of available housing in the city, the new ordinance would be extremely narrow in scope.
- C. The installation of smoke detectors in new residences costs significantly less than the installation of sprinklers.
- D. In the city where the ordinance was proposed, the average time required by the fire department to respond to a fire was less than the national average.
- E. The largest proportion of property damage that results from residential fires is caused by fires that start when no household member is present.

#### Answer with explanation:

The home builder reasons from evidence about most residential fires to a conclusion about the effectiveness of sprinklers in preventing property damage. But this reasoning is faulty because of the possibility that most of the property damage results from the minority of fires excluded from the builder's evidence. That possibility is realized if E is true. Thus, E is the best answer.

Because the builder's argument concerns neither the cost of installing sprinklers not a comparison with fire department performance in other locations, C and D are irrelevant. The evidence the home builder cites suggests that formal training is not needed in order to extinguish fires. So A is not the correct answer. B supports the builder's view that requiring sprinklers would have a limited effect.

19. Even though most universities retain the royalties from faculty members' inventions, the faculty members retain the royalties from books and articles they write. Therefore, faculty members should retain the royalties from the educational computer software they develop. The conclusion above would be more reasonably drawn if which of the following were inserted

into the argument as an additional premise?

- A. Royalties from inventions are higher than royalties from educational software programs.
- B. Faculty members are more likely to produce educational software programs than inventions.
- C. Inventions bring more prestige to universities that do books and articles.
- D. In the experience of most universities, educational software programs are more marketable that are books and articles.
- E. In terms of the criteria used to award royalties, educational software programs are more nearly comparable to books and articles than to inventions.

### Answer with explanation:

The passage concludes that, where royalty retention of faculty members' works is concerned, software should be treated as books and articles are, not as inventions are. The conclusion requires an additional premise establishing that software is, in relevant respects, more comparable to books and articles than to inventions. E provides this kind of premise and is therefore the best answer. A, B,C and D each describe some difference between software and inventions, or between inventions and books and articles, or between software and books and articles. However, none establishes the required relationship among inventions, software, and books and articles.

20. Increase in the level of high-density lipoprotein (HDL) in the human bloodstream lower bloodstream-cholesterol levels by increasing the body's capacity to rid itself of excess cholesterol. Levels of HDL in the bloodstream of some individuals are significantly increased by a program of regular exercise and weight reduction.

Which of the following can be correctly inferred from the statements above?

- A. Individuals who are underweight do not run any risk of developing high levels of cholesterol in the bloodstream.
- B. Individuals who do not exercise regularly have a high risk of developing high levels of cholesterol in the bloodstream late in life.
- C. Exercise and weight reduction are the most effective methods of lowering bloodstream cholesterol levels in humans.
- D. A program of regular exercise and weight reduction lowers cholesterol levels in the bloodstream of some individuals.

E. Only regular exercise is necessary to decrease cholesterol levels in the bloodstream of individuals of average weight.

### Answer with explanation:

If increased HDL levels cause reduced cholesterol levels and if a certain program increases HDL levels in some individuals, it follows that some individuals who undertake that program achieve reduced cholesterol levels. D is thus correctly inferable and the best answer. A cannot be correctly inferred because the statements do not establish any connection between being underweight and levels of cholesterol. Neither of B and E is inferable, since there is no indication that exercise alone is either necessary or sufficient to increase HDL levels or to decrease cholesterol levels. C is inappropriate because other methods of cholesterol reduction are not addressed.

21. When limitations were in effect on nuclear-arms testing, people tended to save more of their money, but when nuclear-arms testing increased, people tended to spend more of their money. The perceived threat of nuclear catastrophe, therefore, decreases the willingness of people to postpone consumption for the sake of saving money.

The argument above assumes that

- A. the perceived threat of nuclear catastrophe has increased over the years.
- B. most people supported the development of nuclear arms
- C. people's perception of the threat of nuclear catastrophe depends on the amount of nuclear-arms testing being done
- D. the people who saved the most money when nuclear-arms testing was limited were the ones who supported such limitations
- E. there are more consumer goods available when nuclear-arms testing increases

#### Answer with explanation:

On the basis of an observed correlation between arms testing and people's tendency to save money, the argument concludes that there is a causal connection between a perception of threat and the tendency not to save. That connection cannot be made unless C, linking the perception of threat to the amount of testing being done, is assumed to be true. Therefore, C is the best answer. The conclusion does not depend on there having been an increase in the perceived threat over time or on how many people supported the development of nuclear arms. Hence, neither of A and B is assumed. The argument does not deal with those who supported arms limitations or with the availability of consumer goods. Thus, D and E are not assumed.

#### 22. Which of the following best completes the passage below?

People buy prestige when they buy a premium product. They want to be associated with something special. Mass-marketing techniques and price-reduction strategies should not be used because\_\_\_\_\_.

- A. affluent purchasers currently represent a shrinking portion of the population of all purchasers
- B. continued sales depend directly on the maintenance of an aura of exclusivity
- C. purchasers of premium products are concerned with the quality as well as with the price of the products

- D. expansion of the market niche to include a broader spectrum of consumers will increase profits
- E. manufacturing a premium brand is not necessarily more costly than manufacturing a standard brand of the same product

#### Answer with explanation:

The incomplete passage calls for an explanation of why price-reduction and mass-marketing methods should not be used for premium products. B, which states that sales of these products require that they appear specials, provides such an explanation. Therefore, B is the best answer. No other choice offers an appropriate explanation. The diminishing proportion of affluent buyers cited in A argues for using price reductions to attract buyers of lesser means. C suggests that purchasers of premium products find reduced prices attractive, and it has not been established that the methods affect quality or perception of quality. D argues for, rather than against, using mass marketing. E is inappropriate, since there is no indication that manufacturing costs are relevant.

23. A cost-effective solution to the problem of airport congestion is to provide high-speed ground transportation between major cities lying 200 to 500 miles apart. The successful implementation of this plan would cost far less than expanding existing airports and would also reduce the number of airplanes clogging both airports and airways.

Which of the following, if true, could be proponents of the plan above most appropriately cite as a piece of evidence for the soundness of their plan?

- A. An effective high-speed ground-transportation system would require major repairs to many highways and mass-transit improvements.
- B. One-half of all departing flights in the nation's busiest airport head for a destination in a major city 225 miles away.
- C. The majority of travelers departing from rural airports are flying to destinations in cities over 600 miles away.
- D. Many new airports are being built in areas that are presently served by high-speed ground-transportation systems.
- E. A large proportion of air travelers are vacationers who are taking long-distance flights.

#### Answer with explanation:

The plan proposes that high-speed ground transportation would be a less expensive solution to airport congestion than would airport expansion. B indicates that between the cities to be served by the plan there is substantial air travel to which ground transportation would represent an alternative. Therefore, B is the best answer. No other choice could be cited appropriately. A and D both provide some evidence against the plan. A by emphasizing the likely costs of providing high-speed ground transportation is not by itself a solution to airport congestion. D by indicating that such an alternative is not by itself a solution to airport congestion. C and E say that there are many travelers for whom the proposed system would actually provide no alternative.

24. If there is an oil-supply disruption resulting in higher international oil prices, domestic oil prices in open-market countries such as the United States will rise as well, whether such countries import all or none of their oil.

If the statement in the passage concerning oil-supply disruptions is true, which of the following policies in an open-market nation is most likely to reduce the long-term economic impact on that nation of sharp and unexpected increases in international oil prices?

- A. Maintaining the quantity of oil imported at constant yearly levels
- B. Increasing the number of oil tankers in its fleet
- C. Suspending diplomatic relations with major oil-producing nations
- D. Decreasing oil consumption through conservation
- E. Decreasing domestic production of oil

#### Answer with explanation:

If the statement about oil-supply disruption is true, domestic oil prices in an open-market country will rise when an oil-supply disruption causes increased international oil prices. A reduction in the amount of oil an open-market country consumes could reduce the economic impact of these increases. D gives a way to reduce oil consumption and is thus the best answer. A and E describe policies that could actually increase the long-term impact of increases in international oil prices, so neither of these choices is appropriate. No relationship is established between the economic impact and either the number of oil tankers or diplomatic relations in B and C, so neither of these choices is appropriate.

25. If there is an oil-supply disruption resulting in higher international oil prices, domestic oil prices in open-market countries such as the United States will rise as well, whether such countries import all or none of their oil.

Which of the following conclusions is best supported by the statement in the passage?

- A. Domestic producers of oil in open-market countries are excluded from the international oil market when there is a disruption in the international oil supply.
- B. International oil-supply disruptions have little, if any, effect on the price of domestic oil as long as an open-market country has domestic supplies capable of meeting domestic demand.
- C. The oil market in an open-market country is actually part of the international oil market, even if most of that country's domestic oil is usually sold to consumers within its borders.
- D. Open-market countries that export little or none of their oil can maintain stable domestic oil prices even when international oil prices rise sharply.
- E. If international oil prices rise, domestic distributors of oil in open-market countries will begin to import more oil than they export.

#### Answer with explanation:

If the oil market in an open-market country were independent, fluctuations in international oil prices would not affect domestic oil prices. However, if the statement about oil-supply disruption is true, it is evidence that domestic oil prices are dependent on the international market and hence that the domestic oil market is a part of the international oil market. Therefore, C is the best answer. B and D are not supported, since each contradicts the claim

that an international oil-supply disruption will lead to rising oil prices in an open-market nation. Nor are A and E supported, since the statement provides information only about the effect of disruption on oil prices, not domestic producers or distributors.

26. The average normal infant born in the United States weighs between twelve and fourteen pounds at the age of three months. Therefore, if a three-month-old child weighs only ten pounds, its weight gain has been below the United States average.

Which of the following indicates a flaw in the reasoning above?

- A. Weight is only one measure of normal infant development.
- B. Some three-month-old children weigh as much as seventeen pounds.
- C. It is possible for a normal child to weigh ten pounds at birth.
- D. The phrase "below average" does not necessarily mean insufficient.
- E. Average weight gain is not the same as average weight.

27. Red blood cells in which the malarial-fever parasite resides are eliminated from a person's body after 120 days. Because the parasite cannot travel to a new generation of red blood cells, any fever that develops in a person more than 120 days after that person has moved to a malaria-free region is not due to the malarial parasite.

Which is the following, if true, most seriously weakens the conclusion above?

- A. The fever caused by the malarial parasite may resemble the fever caused by flu viruses.
- B. The anopheles mosquito, which is the principal insect carrier of the malarial parasite, has been eradicated in many parts of the world.
- C. Many malarial symptoms other than the fever, which can be suppressed with anti-malarial medication, can reappear within 120 days after the medication is discontinued.
- D. In some cases, the parasite that causes malarial fever travels to cells of the spleen, which are less frequently eliminated from a person's body than are red blood cells.
- E. In any region infested with malaria-carrying mosquitoes, there are individuals who appear to be immune to malaria.

28. Fact 1: Television advertising is becoming less effective: the proportion of brand names promoted on television that viewers of the advertising can recall is slowly decreasing.

Fact 2: Television viewers recall commercials aired first or last in a cluster of consecutive commercials far better than they recall commercials aired somewhere in the middle.

Fact 2 would be most likely to contribute to an explanation of fact 1 if which of the following were also true?

- A. The average television viewer currently recalls fewer than half the brand names promoted in commercials he or she saw.
- B. The total time allotted to the average cluster of consecutive television commercials is decreasing.
- C. The average number of hours per day that people spend watching television is decreasing.
- D. The average number of clusters of consecutive commercials per hour of television is increasing.