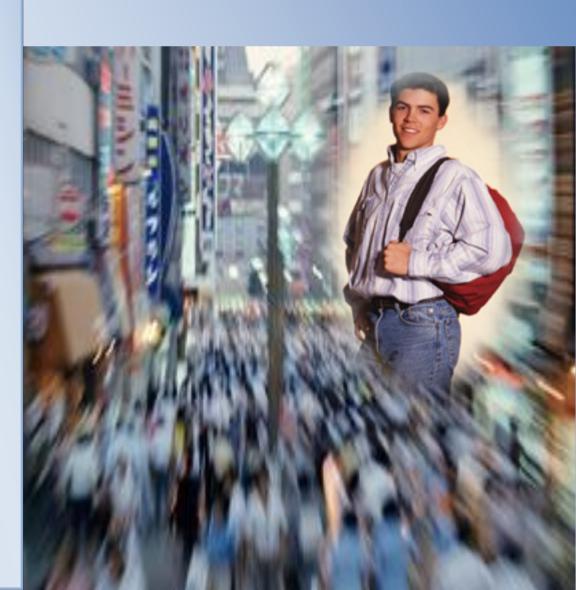
# College of Admission Tests



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The Sample Questions are provided to familiarize you with the contents of the section.

# **Logical Reasoning**



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# Sample Questions for: Logical Reasoning

Difficulty Level: 1 - 5 of 10



Purpose of this set of sample questions is to familiarize the test taker with the question types that appear on the actual test.

# Logical Reasoning

### **Directions:**

Each logical reasoning question in this part of the assessment starts with a reading passage containing the information to be used to choose between correct and incorrect logical conclusions. These conclusions are based on the information in the passage. After this reading passage, you are given a lead-in phrase that tells you to choose from among five different responses. These possible responses are generated by correctly or incorrectly applying logical thought to the information in the passage at the beginning of the question. They can be thought of as different ways of completing a sentence that begins with the lead-in phrase.

1. Testifying before the Senate committee investigating charges that cigarette manufacturers had manipulated nicotine levels in cigarettes in order to addict consumers to their products, tobacco executives argued that cigarette smoking is not addictive. The primary reason they gave in support of this claim was that cigarette smoking was not regulated by the Federal Drug Administration.

For the tobacco executives' argument to be logically correct, which of the following must be assumed?

A. Substances that are not addictive are not regulated by the Federal Drug Administration.

- **B.** The tobacco executives lied when they claimed that cigarette smoking was not addictive.
- **C.** Some addictive substances are not regulated by the Federal Drug Administration.
- **D.** There is no scientific proof that cigarette smoking is addictive.
- E. Substances that are not regulated by the Federal Drug Administration are not addictive.
- 2. People should be held accountable for their own behavior, and if holding people accountable for their own behavior entails capital punishment, then so be it. However, no person should be held accountable for behavior over which he or she had no control.

Which of the following is the most logical conclusion of the argument above?

- **A.** People should not be held accountable for the behavior of other people.
- **B.** People have control over their own behavior.
- **C.** People cannot control the behavior of other people.
- **D.** Behavior that cannot be controlled should not be punished.
- **E.** People have control over behavior that is subject to capital punishment.
- **3.** There is clear evidence that the mandated use of safety seats by children under age four has resulted in fewer child fatalities over the past five years. Compared to the five-year period prior to the passage of laws requiring the use of safety seats, fatalities of children under age four have decreased by 30 percent.

Which one of the following, if true, most substantially strengthens the argument above?

**A.** The number of serious automobile accidents involving children under age four has remained steady over the past five years.

- **B.** Automobile accidents involving children have decreased sharply over the past five years.
- C. The use of air bags in automobiles has increased by 30 percent over the past five years.
- **D.** Most fatal automobile accidents involving children under age four occur in the driveway of their home.
- **E.** The number of teenage drivers has increased by 30 percent over the past five years.
- 4. Lycopene, glutathione, and glutamine are powerful antioxidants that neutralize the free radicals that are produced in the body as a result of routine bodily processes. An excess of these free radicals in your system causes rapid aging because they accelerate the rate of cellular damage. Aging is simply the result of this damage. Thus, to slow down aging it is necessary to supplement your diet with these antioxidants on a daily basis.

Which of the following, if true, most seriously undermines the author's contention?

- A. Most persons aren't concerned with the effects of aging until it is too late to do anything.
- B. Exercise associated with normal daily activities effectively neutralizes and dissipates the free radicals that are produced as a result of routine bodily processes.
- **C.** The cost of antioxidants is exorbitantly high and well beyond the budget of most consumers.
- **D.** Only overweight people who do not exercise on a daily basis are likely to have an excess of free radicals in their systems.
- **E.** Smoking cigarettes is one of the main causes of cellular damage in humans.
- 5. Is it wrong for doctors to lie about their patients' illnesses? Aren't doctors just like any other people we hire to do a job for us? Surely, we would not tolerate not being told the truth about the condition of our automobile from the mechanic we hired to fix it, or the condition of our roof from the carpenter we employed to repair it. Just as these workers would be guilty of violating their good faith contracts with us if they were to do this, doctors who lie to their patients about their illnesses violate these contracts as well, and this is clearly wrong.

The conclusion of the argument is best expressed by which of the following?

- **A.** Doctors who lie to their patients about their illnesses violate their good faith contracts with their patients.
- **B.** Doctors often lie to their patients about their illnesses.
- **C.** Doctors are just hired workers like mechanics and carpenters.
- D. It is wrong for doctors to lie about their patients' illnesses.
- **E.** Doctors, like mechanics and carpenters, enter into good faith contracts with us when we hire them.
- **6.** As any economist knows, healthy people pose less of an economic burden to society than unhealthy people. Not surprisingly, then, every dollar our state government spends on prenatal care for undocumented immigrants will save taxpayers of this state three dollars.

Which of the following, if true, would best explain why the statistics cited above are not surprising?

- **A.** The state's taxpayers pay for prenatal care of all immigrants.
- **B.** Babies born in this state to undocumented immigrant parents are entitled to infant care benefits from the state.
- **C.** State benefits for prenatal care serve to promote undocumented immigration.
- D. Babies whose mothers did not receive prenatal care are just as healthy as other babies.
- E. Pregnant women who do not receive prenatal care are more likely to experience health problems than other pregnant women.
- 7. Beautiful beaches attract people, no doubt about it. Just look at this city's beautiful beaches, which are among the most overcrowded beaches in the state.

Which of the following exhibits a pattern of reasoning most similar to the one exhibited in the argument above?

A. Moose and bear usually appear at the same drinking hole at the same time of day. Therefore, moose and bear must grow thirsty at about the same time.

- **B.** Children who are scolded severely tend to misbehave more often than other children. Hence if a child is not scolded severely that child is less likely to misbehave.
- **C.** This software program helps increase the work efficiency of its users. As a result, these users have more free time for other activities.
- D. During warm weather my dog suffers from fleas more so than during cooler weather. Therefore, fleas must thrive in a warm environment.
- E. Pesticides are known to cause anemia in some people. However, most anemic people live in regions where pesticides are not commonly used.
- 8. Our school district should not spend its money on the new Verbal Advantage reading program. After all, our students get all the reading practice they need by studying history and science.

The argument above depends on which the following assumptions?

- **A.** The Verbal Advantage program would not help the students learn history and science.
- **B.** Other reading programs are just as effective but less expensive than the Verbal Advantage program.
- **C.** The Verbal Advantage program involves only reading practice.
- D. Teaching students history and science is more important than teaching them reading skills.
- **E.** The students can already read well enough to study history and science
- **9.** A study of native born residents in Newland found that two-thirds of the children developed considerable levels of nearsightedness after starting school, while their illiterate parents and grandparents, who had no opportunity for formal schooling, showed no signs of this disability.

If the above statements are true, which of the following conclusions is most strongly supported by them?

**A.** Only people who have the opportunity for formal schooling develop nearsightedness.

- **B.** People who are illiterate do not suffer from nearsightedness.
- **C.** The nearsightedness in the children is caused by the visual stress required by reading and other class work.
- **D.** Only literate people are nearsighted.
- E. One-third of the children are illiterate.
- 10. Newspaper publishers earn their profits primarily from advertising revenue, and potential advertisers are more likely to advertise in newspapers with a wide circulation a large number of subscribers and other readers than with other newspapers. But the circulation of the newspaper that is currently the most profitable one in this city has steadily declined during the last two years, while the circulation of one of its competitors has steadily increased.

Any of the following, if true, would help explain the apparent discrepancy between the two statements above EXCEPT:

- **A.** Advertisers generally switch from the most widely circulated newspaper to another one only when the other one becomes the most widely circulated newspaper instead.
- **B.** Advertising rates charged by the most profitable newspaper in the city are significantly higher than those charged by its competitors.
- **C.** The most profitable newspaper in the city receives revenue from its subscribers as well from advertisers.
- **D.** The circulation of the most profitable newspaper in the city is still greater than of any of its competitors.
- **E.** The number of newspapers competing viably with the most profitable newspaper in the city has increased during the last two years.
- 11. Although most of the fastest growing jobs in today's economy will require a college degree, many of the new jobs being created-from home health aide to desktop publisher-require knowledge other than that gained from earning a degree. For workers in those jobs, good basic skills in reading, communication, and mathematics play an important role in getting a job and developing a career.

From the information given above it can be validly concluded that, in today's economy,

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# **Logical Reasoning Sample Question**

- A. skills in reading, communication, and mathematics play an important role in developing a career as a desktop publisher
- **B.** the majority of the new jobs being created require knowledge other than that gained from earning a college degree
- **C.** a job as a home health aide will rely more on communication skills than on basic skills in reading and mathematics
- **D.** if a job is one of the fastest growing jobs, it will require a college degree
- **E.** desktop publisher jobs and home health aide jobs are not among the fastest growing jobs
- 12. According to the National Agricultural Aviation Society (NAAS), without the use of crop protection products to control insects, weeds, and diseases, crop yields per acre will drop by more than 50 percent. The first aerial application of insecticide occurred in 1921, and it was a huge success. By contrast, in today's economy all aircraft that are classified as aerial applicators do more than just apply insecticide; today, they also spread seed and apply fertilizer.

From the information given above it CANNOT be validly concluded that

- **A.** in today's economy, if an aerial applicator is used, then it will be able to spread seed and to apply fertilizer
- B. according to the NAAS, if crop yields per acre never drop by more than 50 percent, then crop protection products have been used to control insects, weeds, and diseases
- C. in today's economy, any aircraft that cannot be used to apply fertilizer cannot be classified as an aerial applicator
- **D.** in 1921, if an aircraft was used for the application of insecticide, then it was not also used to spread seed
- **E.** according to the NAAS, if crop yields per acre drop by more than 50 percent, then crop protection products have not been used to control insects, weeds, and diseases.
- 13. No national productivity measures are available for underground industries that may exist but remain unreported. On the other hand, at least some industries that are run entirely by self-employed industrialists are included in national productivity measures.

From the information given above, it can be validly concluded that

- **A.** there are at least some industries run entirely by self-employed industrialists that are underground industries
- **B.** no industries that are run entirely by selfemployed industrialists operate underground
- **C.** there are at least some industries other than those run entirely by self-employed industrialists that are underground industries
- **D.** there are at least some industries run entirely by self-employed industrialists that are not underground industries
- E. there are at least some underground industries for which national productivity measures are available
- 14. Lou observes that if flight 409 is canceled, then the manager could not possibly arrive in time for the meeting. But the flight was not canceled. Therefore, Lou concludes, the manager will certainly be on time. Evelyn replies that even if Lou's premises are true, his argument is fallacious. And therefore, she adds, the manager will not arrive on time after all.

Which of the following is the strongest thing that we can properly say about this discussion?

- **A.** Evelyn is mistaken in thinking Lou's argument to be fallacious, and so her own conclusion is unwarranted.
- **B.** Evelyn is right about Lou's argument, but nevertheless her own conclusion is unwarranted.
- **C.** Since Evelyn is right about Lou's argument, her own conclusion is well supported.
- **D.** Since Evelyn is mistaken about Lou's argument, her own conclusion must be false.
- **E.** Evelyn is right about Lou's argument, but nevertheless her own conclusion is false.
- **15.** Sally has never received a violation from the Federal Aviation Administration during her 16-year flying career. Sally must be a great pilot.

Which of the following can be said about the reasoning above?

- **A.** The definitions of the terms create ambiguity.
- **B.** The argument uses circular reasoning.
- **C.** The argument works by analogy.

- **D.** The argument is built upon hidden assumptions.
- **E.** This is an example of an argument that is directed against the source of the claim rather than the claim itself.
- 16. The Japanese economic model created strong domestic industries through subsidies from its Ministry of Trade and by closing off competitive foreign firms to its domestic market. This strategy promised to help economic growth by incubating domestic industries. New Japanese industries could count on a known local demand and would be protected from competition by tariffs and other barriers. The program could reduce the amount of imports and therefore improve the nation's balance of trade.

Which of the following, based on the passage above, is a weakness in this economic strategy?

- **A.** A protectionist policy will create animosity among other nations.
- **B.** Fast growth of small industries will create a class of millionaires and increase the inequality of income.
- C. Subsidies and import constraints keep domestic prices high and impose a burden on consumers.
- D. Quotas are more regressive than tariffs.
- **E.** The demand for the products made by the incubated industries would not be known.
- 17. Historically, famines have generally been followed by periods of rising wages, because when a labor force is diminished, workers are more valuable in accordance with the law of supply and demand. The Irish potato famine of the 1840s is an exception; it resulted in the death or emigration of half of Ireland's population, but there was no significant rise in the average wages in Ireland in the following decade.

Which one of the following, if true, would LEAST contribute to an explanation of the exception to the generalization?

- A. Improved medical care reduced the mortality rate among able-bodied adults in the decade following the famine to below pre-famine levels.
- **B.** Eviction policies of the landowners in Ireland were designed to force emigration of the

- elderly and infirm, who could not work, and to retain a high percentage of able-bodied workers.
- **C.** Advances in technology increased the efficiency of industry and agriculture, and so allowed maintenance of economic output with less demand for labor.
- D. The birth rate increased during the decade following the famine, and this compensated for much of the loss of population that was due to the famine.
- E. England, which had political control of Ireland legislated artificially low wages to provide English-owned industry and agriculture in Ireland with cheap labor.
- **18.** Cars are safer than planes. Fifty percent of plane accidents result in death, while only one percent of car accidents result in death.

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

- A. Planes are inspected more often than cars.
- **B.** The number of car accidents is several hundred thousand times higher than the number of plane accidents.
- **C.** Pilots never fly under the influence of alcohol, while car drivers often do.
- **D.** Plane accidents are usually the fault of air traffic controllers, not pilots.
- **E.** Planes carry more passengers than cars do.
- 19. The body of anyone infected by virus X will, after a week produce antibodies to fight the virus; the antibodies will increase in number for the next year or so. There is now a test that reliably indicates how many antibodies are present in a person's body. If positive, this test can be used during the first year of infection to estimate to within a month how long that person has had the virus.

Which one of the following conclusions is best supported by the statements above?

- **A.** Antibodies increase in number only until they have defeated the virus.
- **B.** Without the test for antibodies, there is no way of establishing whether a person has virus X.
- **C.** Antibodies are produced only for viral infections that cannot be fought by any other body defenses.

- D. If a person remains infected by virus X indefinitely, there is no limit to the number of antibodies that can be present in the person's body.
- **E.** Anyone infected by virus X will for a time fail to exhibit infection if tested by the antibody test.
- **20.** Ever since I arrived at the college last week, I've been shocked by the poor behavior of the students. The student population is completely lacking in proper social skills.

Which of the following, if true, would weaken the above conclusion?

- **A.** Students who are away from their parents often exhibit rude behavior.
- **B.** The college numbers over 50,000 students.
- **C.** The narrator is a student and has interacted with many students.
- **D.** Social skills should not be expected of college students.
- **E.** The narrator was reluctant to stay at the college.
- 21. A study of a math program implemented in several pre-schools indicates that children who received the specialized Math Plus math education between the ages three and five had significantly higher math scores in 3rd and 4th grade than their classmates who did not receive this instruction. The proponents of the math argue that the introduction of this program for all children age three to five will significantly improve their chances for success in school.

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

- A. Most parents send their children to preschool for social development and do not have a clear idea about what types of education they want for their children.
- **B.** Cognitive abilities of 3- to 5-year-old children are constantly changing.
- **c.** The children in the pre-schools that were studied had previously been exposed to another math enrichment program.
- **D.** Children are not really interested in enrichment programs in preschool.
- **E.** The cost factor needs to be specified and established before a large scale program can be undertaken.

22. The symptoms of mental disorders are behavioral, cognitive, or emotional problems. Some patients with mental disorders can be effectively treated with psychotherapy, but it is now known that in some patients' mental disorders result from chemical imbalances affecting the brain. Thus, these patients can be effectively treated only with medication that will reduce or correct the imbalance.

The argument depends on assuming which one of the following?

- **A.** Treatment by psychotherapy can produce no effective reduction in or correction of chemical imbalances that cause mental disorders.
- **B.** Treatment with medication always shows faster results for patients with mental disorders than does treatment with psychotherapy
- **C.** Most mental disorders are not the result of chemical imbalances affecting the brain.
- **D.** Medication is always more effective in treating patients with mental disorders than is psychotherapy.
- **E.** Treatment with psychotherapy has no effect on mental disorders other than a reduction of the symptoms.
- 23. Dear Editor: I feel obliged to comment on the unfair review you published last week written by Robert Duxbury. Your readers should know that Mr. Duxbury recently published his own book that covered the same topic as my book, which you asked him to review. It is regrettable that Mr. Duxbury should feel the need to belittle a competing work in the hope of elevating his own book.

The author of the letter above makes her point by employing which method of argument?

- **A.** Attacking the motives of the author of the unfavorable review.
- **B.** Attacking the book on the same topic written by the author of the review.
- **C.** Contrasting her own book with that written by the author of the review.
- **D.** Questioning the judgment of the author of the unfavorable review.
- **E.** Stating that her book should not have been reviewed by the author of a competing work.

**24.** The government of Nigeria has refused to schedule free elections, release political prisoners, or restore freedom of speech; therefore, no more financial aid from the United States should be provided to Nigeria.

Which of the following is an assumption made in the argument above?

- **A.** Withdrawal of U.S. aid from Nigeria will force a change in the policies of its government.
- **B.** The people of Nigeria would be better off if their present despotic government were overthrown.
- **C.** The government of Nigeria is dependent on continued U.S. aid for its existence.
- D. U.S. aid should be given only to countries willing to adopt policies in line with U.S. interests and goals.
- **E.** U.S. aid should be withdrawn from any country that refuses to operate its government along democratic lines.
- 25. Many people argue that the death penalty deters murder. However, the notorious killer Ned Grandy deliberately moved to a state that imposes the death penalty just before embarking on a series of ferocious murders. Thus, it seems clear that the existence of the death penalty does not serve as a deterrent to murder.

The argument above may best be characterized as:

- A. an appeal to emotion.
- **B.** a flawed analogy.
- **C.** a general conclusion based on a specific example.
- **D.** circular reasoning.
- **E.** an application of a general principle to a specific example.
- 26. Steve and JoAnne are both members of a certain club, though they are not speaking to each other and refuse to work with each other. Cecily, the club president, is appointing members to the fundraising committee, but she has resolved that she will not appoint anyone without his or her explicit consent. Steve tells Cecily, "I will not consent to appointment on that committee unless I know whether JoAnne is to be a member of it." And JoAnne says, "I will not consent to be a member of that

committee unless I know whether Steve will be appointed to it."

If all three of these people stick by these resolutions, then:

- **A.** Neither of them can be appointed to the committee.
- **B.** The situation described in the scenario cannot arise, because it is inherently incoherent.
- **C.** They must either both be appointed or both be left out.
- **D.** The committee may finally have one of them, both of them, or neither of them as members.
- **E.** Either one of them can be appointed, but not both.
- 27. Russia's aggressive fishing in the prime fishing grounds of the Northern Pacific has led to a sharp decline in the populations of many fish and a general increase in the retail price of fish. This same pattern has occurred with far too many of our scarce vital natural resources, resulting in high prices for many products. It is likely then, that fish prices will continue to rise in the near future.

In making the argument above, the author relies on all of the following assumptions EXCEPT:

- **A.** The scarcity of fish is a determining factor in its price.
- **B.** The decline in the number of fish available will result in higher prices for fish in stores.
- **C.** There will not be any substantial decrease in other costs involved in the fishing process that could keep the price of fish from increasing.
- **D.** Fish populations will not recover in the near future.
- **E.** Fishing practices can substantially influence the demand for fish.
- 28. During the past year, KIA Corporation, a cigarette manufacturer, has engaged in a "corporate image" advertising campaign. One executive now urges that the advertising be extended for another year because profits have increased by 29% over the previous year. Another executive, however, is skeptical. She observes that the increases are typical for the industry over the past year, although none of

their competitors have used corporate image advertising.

The most accurate way of summarizing the second executive's point would be:

- **A.** She argues that the effect may not really be due to its supposed cause because there has not been a sufficient lapse of time between the cause and the effect.
- **B.** She argues that the assignment of a cause for this effect is premature, because there is as yet no well-established theory of such interactions.
- C. She argues that corporate image advertising is unprofitable, since it has evidently benefited competitors as much as the corporation that paid for it.
- D. She knows that effective advertising requires a constant influx of new ideas and approaches, and she argues that one year of corporate image advertising is enough for awhile.
- **E.** She argues that the effect may not be due to its alleged cause since the same effect is found elsewhere without that cause.
- 29. The senate candidate expressed outrage that few judges have any background in technology, yet they try to resolve cases involving high tech companies. He stated that not one federal judge has a degree or any experience in computer technology.

A promising response to this concern, arguing that things are not as bad as they might seem, could involve which of the following claims?

- A. Most of the public policy questions in this area are really about the morality and the value of scientific and technological developments. They do not require much technical understanding beyond that of a layperson.
- B. Computer scientists, by and large, have little interest in politics and public policy. It would be difficult to find scientists with the degree of commitment required for a serious contribution to the judicial system.
- **C.** There is a lack of people who are qualified in both technical and legal areas of expertise.
- **D.** There is very little opportunity for, and indeed little need for, technical expertise in

- the judicial branch. There is therefore almost no way for a technical specialist to rise through the ranks to a top-level position in government.
- E. The rewards of a life as a judge, in terms of both money and prestige, are not high enough to attract top-flight technical experts to this area.
- **30.** There has been a sharp increase in the subscription prices of many professional and scholarly journals in the past seven years. Many publishers ascribe the necessity for these increases to the easy availability of photocopying facilities, which enable people simply to copy the articles they want rather than buying the journal.

Which of the following, if it is true, would make this explanation more plausible?

- **A.** The great majority of professional and scholarly journals have a massive backlog of papers awaiting publication.
- **B.** Over the past five years there has been a substantial decline in the number of individual subscriptions to professional and scholarly journals, while library subscriptions have remained fairly stable.
- C. In the five years immediately preceding the price surge, there was a substantial decline in the number of individual subscriptions to professional and scholarly journals, while library subscriptions remained fairly stable.
- **D.** Many libraries have recently begun cutting back on subscriptions to professional and scholarly journals.
- **E.** In almost every field, several new professional and scholarly journals have begun publication in the past few years.

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