

GMAT Prep

Critical Reasoning 5



Critical Reasoning 5

Topic: Plan

Plan questions ask you to construct or judge reasoning about proposed courses of action, or plans.

- Plan questions use many of the same phrases found in Construction and Critique questions, the questions are always about plans, strategies, or courses of action.

- Plan questions may ask:

what must be true for a plan to succeed, what conditions would make a plan more or less likely to succeed, what would be most helpful to know in order to judge a plan, what evidence would best support someone's opinion about a plan, how a plan is flawed, what strategy would most help overcome a problem, what policy would most help reach a goal under certain conditions, or why a plan succeeded, failed, or had some unexpected effect



Critical Reasoning 5

1. A major health insurance company in Lagolia pays for special procedures prescribed by physicians only if the procedure is first approved as “medically necessary” by a company-appointed review panel. The rule is intended to save the company the money it might otherwise spend on medically unnecessary procedures. The company has recently announced that in order to reduce its costs, it will abandon this rule.

Which of the following, if true, provides the strongest justification for the decision?

- A. Patients often register dissatisfaction with physicians who prescribe nothing for their ailments.
- B. Physicians often prescribe special procedures that are helpful but not altogether necessary for the health of the patient.
- C. The review process is expensive and practically always results in approval of the prescribed procedure.
- D. The company’s review process does not interfere with the prerogative of physicians, in cases where more than one effective procedure is available, to select the one they personally prefer.
- E. The number of members of the company-appointed review panel who review a given procedure depends on the cost of the procedure.



Critical Reasoning 5

2. 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 potatoes 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 potatoes 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.



Critical Reasoning 5

3. It is widely assumed that people need to engage in intellectual activities such as solving crossword puzzles or mathematics problems in order to maintain mental sharpness as they age. In fact, however, simply talking to other people – that is, participating in social interaction, which engages many mental and perceptual skills – suffices. Evidence to this effect comes from a study showing that the more social contact people report, the better their mental skills.

Which of the following, if true, most seriously weakens the force of the evidence cited?

- A. As people grow older, they are often advised to keep exercising their physical and mental capacities in order to maintain or improve them.
- B. Many medical conditions and treatments that adversely affect a person's mental sharpness also tend to increase that person's social isolation.
- C. Many people are proficient both in social interactions and in solving mathematical problems.
- D. The study did not itself collect data but analyzed data bearing on the issue from prior studies.
- E. The tasks evaluating mental sharpness for which data were compiled by the study were more akin to mathematics problems than to conversation.



Critical Reasoning 5

4. Near Chicago, a newly built hydroponic spinach “factory,” a completely controlled environment for growing spinach, produces on 1 acre of floor space what it takes 100 acres of fields to produce. Expenses, especially for electricity, are high, however, and the spinach produced costs about four times as much as washed California field spinach, the spinach commonly sold throughout the United States.

Which of the following, if true, best supports a projection that the spinach-growing facility near Chicago will be profitable?

- A. Once the operators of the facility are experienced, they will be able to cut operating expenses by about 25 percent.
- B. There is virtually no scope for any further reduction in the cost per pound for California field spinach.
- C. Unlike washed field spinach, hydroponically grown spinach is untainted by any pesticides or herbicides and thus will sell at exceptionally high prices to such customers as health food restaurants.
- D. Since spinach is a crop that ships relatively well, the market for hydroponically grown spinach is no more limited to the Chicago area than the market for California field spinach is to California.
- E. A second hydroponic facility is being built in Canada, taking advantage of inexpensive electricity and high vegetable prices.



Critical Reasoning 5

5. Pro-Tect Insurance Company has recently been paying out more on car theft claims than it expected. Cars with special antitheft devices or alarm systems are much less likely to be stolen than are other cars. Consequently, Pro-Tect, as part of an effort to reduce its annual pay-outs, will offer a discount to holders of car-theft policies if their cars have antitheft devices or alarm systems.

Which of the following, if true, provides the strongest indication that the plan is likely to achieve its goal?

- A. The decrease in the risk of car theft conferred by having a car alarm is greatest when only a few cars have such alarms.
- B. The number of policyholders who have filed a claim in the past year is higher for Pro-Tect than for other insurance companies.
- C. In one or two years, the discount that Pro-Tect is offering will amount to more than the cost of buying certain highly effective anti-theft devices.
- D. Currently, Pro-Tect cannot legally raise the premiums it charges for a given amount of insurance against car theft.
- E. The amount Pro-Tect has been paying out on car theft claims has been greater for some models of cars than for others.



Critical Reasoning 5

6. An eyeglass manufacturer tried to boost sales for the summer quarter by offering its distributors a special discount if their orders for that quarter exceeded those for last year's summer quarter by at least 20 percent. Many distributors qualified for this discount. Even with much merchandise discounted, sales increased enough to produce a healthy gain in net profits. The manufacturer plans to repeat this success by offering the same sort of discount for the fall quarter.

Which of the following, if true, most clearly points to a flaw in the manufacturer's plan to repeat the successful performance of the summer quarter?

- A. In general, a distributor's orders for the summer quarter are no higher than those for the spring quarter.
- B. Along with offering special discounts to qualifying distributors, the manufacturer increased newspaper and radio advertising in those distributors' sales areas.
- C. The distributors most likely to qualify for the manufacturer's special discount are those whose orders were unusually low a year earlier.
- D. The distributors who qualified for the manufacturer's special discount were free to decide how much of that discount to pass on to their own customers.
- E. The distributors ordering more goods in the summer quarter left them overstocked for the fall quarter.



Critical Reasoning 5

7. Researchers hope to find clues about the A'mk people who lived in the Kaumpta region about one thousand years ago but who left few obvious traces. The researchers plan to hire the few remaining shamans of the modern-day indigenous bet in Kaumpta, who are believed to be descended from the A'mk, to lead them to ancestral sites that may be the remains of A'mk buildings or ceremonial spaces. The shamans were taught the location of such sites as part of their traditional train. as youths, and their knowledge of traditional Kaumpta customs may help determine the nature of any sites the researchers find.

Which of the following is an assumption on which the success of the plan depends?

- A. The researchers have reliable evidence that the A'mk of one thousand years ago built important ceremonial spaces.
- B. The shamans have a reasonably accurate memory of A'mk sites they learned about as youths.
- C. Kaumpta shamans are generally held in high esteem for their traditional knowledge.
- D. Modern technologies available to the researchers are likely to be able to find some A'mk sites easily.
- E. Most or all A'mk sites are likely to be found within the Kaumpta region.



Critical Reasoning 5

8. With employer-paid training, workers have the potential to become more productive not only in their present employment but also in any number of jobs with different employers. To increase the productivity of their workforce, many firms are planning to maintain or even increase their investments in worker training. But some training experts object that if a trained worker is hired away by another firm, the employer that paid for the training has merely subsidized a competitor. They note that such hiring has been on the rise in recent years.

Which of the following would, if true, contribute most to defeating the training experts' objection to the firms' strategy?

- A. Firms that promise opportunities for advancement to their employees get, on average, somewhat larger numbers of job applications from untrained workers than do firms that make no such promise.
- B. In many industries, employees who take continuing-education courses are more competitive in the job market.
- C. More and more educational and training institutions are offering reduced tuition fees to firms that subsidize worker training.
- D. Research shows that workers whose training is wholly or partially subsidized by their employer tend to get at least as much training as do workers who pay for all their own training.
- E. For most firms that invest in training their employees, the value added by that investment in employees who stay exceeds the value lost through other employees' leaving to work for other companies



Critical Reasoning 5

9. Executives at the Fizzles Beverage Company plan to boost profits in Country X on their range of fruit-flavored drinks by introducing new flavors based on tropical fruits that are little known there. The executives' reason that since the fruit drinks of other companies have none of these flavors, Fizzles will not have to compete for customers and thus will be able to sell the drinks at a higher price.

Which of the following, if true, presents the most serious potential weakness of the plan?

- A. The new fruit drinks would be priced significantly higher than other Fizzles fruit drinks with more conventional flavors.
- B. In a telephone survey, at least one of the consumers contacted said that they preferred many of the new flavors to all of the more familiar flavors.
- C. To build widespread demand for the new flavors, Fizzles would have to launch an advertising campaign to familiarize consumers with them.
- D. Consumers choosing among fruit-flavored drinks of different brands generally buy on the basis of name recognition and price rather than the specific fruit flavor.
- E. Few consumers who are loyal to a specific brand of fruit-flavored drinks would willingly switch to another brand that costs more.



Critical Reasoning 5

10. A provincial government plans to raise the gasoline tax to give people an incentive to drive less, reducing traffic congestion in the long term. However, skeptics point out that most people in the province live in areas where cars are the only viable transportation to jobs and stores and therefore cannot greatly change their driving habits in response to higher gasoline prices.

In light of the skeptics' objection, which of the following, if true, would most logically support the prediction that the government's plan will achieve its goal of reducing traffic congestion?

- A. The revenue from the tax will be used to make public transportation a viable means of transportation to jobs and stores for far more people.
- B. The tax will encourage many residents to switch to more fuel-efficient cars, reducing air pollution and other problems.
- C. Because gasoline has been underpriced for decades, the province has many neighborhoods where cars are the only viable means of transportation
- D. Most residents who cannot greatly change their driving habits could compensate for high gasoline prices by reducing other expenses.
- E. Traffic congestion is an especially serious problem for people for whom cars are the only viable means of transportation.



Critical Reasoning 5

11. During the earliest period of industrialization in Britain, steam engines were more expensive to build and operate than either windmills or water mills, the other practicable sources of power for factories. Yet despite their significant cost disadvantages, steam-powered factories were built in large numbers well before technical improvements brought their cost down. Furthermore, they were built even in regions where geographical conditions permitted the construction of wind- and water-powered factories close to major markets.

Which of the following, if true, most helps to explain the proliferation of steam-powered factories during the earliest period of industrialization in Britain?

- A. In many areas of Britain, there were fewer steam-powered factories than wind- or water-powered factories in the earliest period of industrialization.
- B. Unlike wind- or water-powered factories, steam-powered factories were fueled with coal, which sometimes had to be transported at significant distances from the mine to the site of the factory.
- C. It was both difficult and expensive to convert a factory from wind power or water power to steam power.
- D. In the early period of industrialization, many goods sold in towns and cities could not be mass-produced in factories.
- E. In Britain, the number of sites where a wind or water-powered factory could be built was insufficient to provide for all of the demand for factory-produced goods at the time.



Critical Reasoning 5

12. Snowmaking machines work by spraying a mist that freezes immediately on contact with cold air. Because the sudden freezing kills bacteria, QuickFreeze is planning to market a wastewater purification system that works on the same principle. The process works only when temperatures are cold, however, so municipalities using it will still need to maintain a conventional system.

Which of the following, if true, provides the strongest grounds for a prediction that municipalities will buy Quick Freeze's purification system despite the need to maintain a conventional purification system as well?

- A. Bacteria are not the only impurities that must be removed from wastewater.
- B. Many municipalities have old wastewater purification systems that need to be replaced.
- C. Conventional wastewater purification systems have not been fully successful in killing bacteria at cold temperatures.
- D. During times of warm weather, when it is not in use, Quick Freeze's purification system requires relatively little maintenance.
- E. Places where the winters are cold rarely have a problem of water shortage.



Critical Reasoning 5

13. Archaeologists use technology to analyze ancient sites. It is likely that this technology will advance considerably in the near future, allowing archaeologists to gather more information than is currently possible. If they study certain sites now, they risk contaminating or compromising them for future studies. Therefore, in order to maximize the potential for gathering knowledge in the long run, a team of archaeologists plans to delay the examination of a newly excavated site.

Which of the following would be most useful to investigate for the purpose of evaluating the plan's prospects for achieving its goal?

- A. Whether any of the contents of the site will significantly deteriorate before the anticipated technology is available
- B. Whether there will continue to be improvements in the relevant technology
- C. Whether the team can study a site other than the newly excavated site for the time being
- D. Whether the site was inhabited by a very ancient culture
- E. Whether the anticipated technology will damage objects under study



Critical Reasoning 5

14. Enterprise Bank currently requires customers with checking accounts to maintain a minimum balance or pay a monthly fee. Enterprise plans to offer accounts with no monthly fee and no minimum balance requirement; to cover their projected administrative costs of \$3 per account per month they plan to charge \$30 for overdrawing an account. Since each month on average slightly more than 10 percent of Enterprise's customers overdraw their accounts, bank officials predict the new accounts will generate a profit.

Which of the following, if true, most strongly supports the bank officials' prediction?

- A. Some of Enterprise Bank's current checking account customers are expected to switch to the new accounts once they are offered.
- B. One-third of Enterprise Bank's revenues are currently derived from monthly fees tied to checking accounts.
- C. Many checking account customers who occasionally pay a fee for not maintaining a minimum balance in their account generally maintain a balance well above the minimum.
- D. Customers whose checking accounts do not have a minimum balance requirement are more likely than others to overdraw their checking accounts.
- E. Customers whose checking accounts do not have a minimum balance requirement are more likely than others to write checks for small amounts.



Critical Reasoning 5

15. 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.



Critical Reasoning 5

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

In a typical year, Innovair's airplanes are involved in 35 collisions while parked or being towed in airports, with a resulting yearly cost of \$1,000,000 for repairs. To reduce the frequency of ground collisions, Innovair will begin giving its ground crews additional training, at an annual cost of \$500,000. Although this will cut the number of ground collisions by about half at best, the drop in repair costs can be expected to be much greater, since _____.

- A. most ground collisions happen when ground crews are rushing to minimize the time a delayed airplane spends on the ground
- B. a ground collision typically occurs when there are no passengers on the airplane
- C. the additional training will focus on helping ground crews avoid those kinds of ground collisions that cause the costliest damage
- D. the \$500,000 cost figure for the additional training of ground crews includes the wages that those crews will earn during the time spent in actual training
- E. most ground collisions have been caused by the least experienced ground-crew members



Critical Reasoning 5

17. Many agriculturally intensive areas of the world are beginning to encounter water scarcity problems. As a result, many farmers in these areas are likely to reduce their output as the water supply, they need in order to maintain production shrinks. However, one group of farmers in such a region plans to increase their production by implementing techniques for water conservation.

Which of the following, if true, would most strongly support the prediction that the group's plan will succeed?

- A. Farmers that can gain a larger share of the food market in their regions will be better positioned to control more water resources.
- B. Most agricultural practices in areas with water shortages are water intensive.
- C. Other regions of the world not facing water shortages are likely to make up for the reduction in agricultural output.
- D. Demand for agricultural products in the group's region is not expected to decline.
- E. More than half the water used for agriculture in the farmers' region is lost to evaporation or leakage from irrigation channels.



Critical Reasoning 5

18. Only a reduction of 10 percent in the number of scheduled flights using Greentown's airport will allow the delays that are so common there to be avoided. Hevelia airstrip, 40 miles away, would, if upgraded and expanded, be an attractive alternative for fully 20 percent of the passengers using Greentown airport. Nevertheless, experts reject the claim that turning Hevelia into a full-service airport would end the chronic delays at Greentown.

Which of the following, if true, most helps to justify the experts' position?

- A. Turning Hevelia into a full-service airport would require not only substantial construction at the airport itself, but also the construction of new access highways.
- B. A second largely undeveloped airstrip close to Greentown airport would be a more attractive alternative than Hevelia for many passengers who now use Greentown.
- C. Hevelia airstrip lies in a relatively undeveloped area but would, if it became a full-service airport, be a magnet for commercial and residential development.
- D. If an airplane has to wait to land, the extra jet fuel required adds significantly to the airline's costs.
- E. Several airlines use Greentown as a regional hub, so that most flights landing at Greentown have many passengers who then take different flights to reach their final destinations.



Critical Reasoning 5

19. The air quality board recently informed Coffee Roast, a small coffee roasting firm, of a complaint regarding the smoke from its roaster. Recently enacted air quality regulations require machines roasting more than 10 pounds of coffee to be equipped with expensive smoke-dissipating afterburners. The firm, however, roasts only 8 pounds of coffee at a time. Nevertheless, the company has decided to purchase and install an afterburner.

Which of the following, if true, most strongly supports the firm's decision?

- A. Until setting the new air quality regulations, the board had debated whether to require afterburners for machines roasting more than 5 pounds of coffee at a time.
- B. Coffee roasted in a machine equipped with an afterburner has its flavor subtly altered.
- C. The cost to the firm of an afterburner is less than the cost of replacing its roaster with a smaller one.
- D. Fewer complaints are reported in areas that maintain strict rules regarding afterburners.
- E. The firm has reason to fear that negative publicity regarding the complaints could result in lost sales.



Critical Reasoning 5

20. In Mernia commercial fossil hunters often sell important fossils they have found, not to universities or museums, but to individual collectors, who pay much better but generally do not allow researchers access to their collections. To increase the number of fossils available for research, some legislators propose requiring all fossils that are found in Merina to be sold only to universities or museums.

Which of the following, if true, most strongly indicates that the legislators' proposal will fail to achieve its goal?

- A. Some fossil hunters in Mernia are not commercial fossil hunters but rather are amateurs who keep the fossils that they find.
- B. Most fossils found in Mernia are common types that have little scientific interest.
- C. Most fossils are found by commercial fossil hunters, and they would give up looking for fossils if they were no longer allowed to sell to individual collectors.
- D. Many universities in Mernia do not engage in fossil research.
- E. Commercial fossil hunters in Mernia currently sell some of the fossils they find to universities and museums.



Critical Reasoning 5

21. Marketing executive for Magu Corporation: Whenever Magu opens a manufacturing facility in a new city, the company should sponsor, or make donations to, a number of nonprofit organizations in that city. Doing so would improve Magu's image in the community, and thus the money spent on such charitable ventures would lead to increased sales.

Which statement would, if true, point to the most serious weakness in the marketing executive's advice?

- A. Magu sells its products internationally, so sales in any one city represent only a small portion of total revenue.
- B. Spending on charitable ventures would require Magu to decrease direct advertisements, which are the most effective means of reaching its target customers.
- C. If market conditions change, Magu may have to close any such facility or relocate it.
- D. Some nonprofit organizations are poorly organized, so money donated to them would be of little benefit to the community.
- E. If workers at the manufacturing facility believed their wages or working conditions were poor, their complaints would outweigh any good impressions generated by Magu's donations or sponsorships.



Critical Reasoning 5

22. While many people think of genetic manipulation of food crops as being aimed at developing larger and larger plant varieties, some plant breeders have in fact concentrated on discovering or producing dwarf varieties, which are roughly half as tall as normal varieties.

Which of the following would, if true, most help to explain the strategy of the plant breeders referred to above?

- A. Plant varieties used as food by some are used as ornamentals by others.
- B. The wholesale prices of a given crop decrease as the supply of it increases.
- C. Crops once produced exclusively for human consumption are often now used for animal feed.
- D. Short plants are less vulnerable to strong wind and heavy rains.
- E. Nations with large industrial sectors tend to consume more processed grains.



Critical Reasoning 5

23. The tulu, a popular ornamental plant, does not reproduce naturally, and is only bred and sold by specialized horticultural companies. Unfortunately, the tulu is easily devastated by a contagious fungal rot. The govt ministry plans to reassure worried gardeners by requiring all tulu plants to be tested for fungal rot before being sold. However, infected plants less than 30 weeks old have generally not built enough fungal rot to be detected reliably. And many tulu plants are sold before they are 24 weeks old.

Which of the following, if performed by the govt ministry, could logically be expected to overcome the problem with their plan to test fungal rot.

- A. Releasing a general announcement that tulu plants less than 30 weeks old cannot be effectively tested for fungal rot
- B. Requiring all tulu plants less than 30 weeks old to be labeled as such.
- C. Researching possible ways to test tulu plants less than 24 weeks old for fungal rot.
- D. Ensuring that tulu plants are not sold before they are 30 weeks old.
- E. Quarantining all tulu plants from horticultural companies at which any case of fungal rot has been detected until those tulu plants can be tested for fungal rot.



Critical Reasoning 5

24. Enforcement of local speed limits through police monitoring has proven unsuccessful in the town of Ardane. In many nearby towns, speed humps (raised areas of pavement placed across residential streets, about 300 feet apart) have reduced traffic speeds on residential streets by 20 to 25 percent. In order to reduce traffic speed and thereby enhance safety in residential neighborhoods, Ardane's transportation commission plans to install multiple speed humps in those neighborhoods.

Which of the following, if true, identifies a potentially serious drawback to the plan for installing speed humps in Ardane?

- A. On residential streets without speed humps, many vehicles travel at speeds more than 25 percent above the posted speed limit.
- B. Because of their high weight, emergency vehicles such as fire trucks and ambulances must slow almost to a stop at speed humps.
- C. The residential speed limit in Ardane is higher than that of the nearby towns where speed humps were installed.
- D. Motorists who are not familiar with the streets in Ardane's residential districts would be likely to encounter the speed humps unawares unless warned by signs and painted indicators.
- E. Bicyclists generally prefer that speed humps be constructed so as to leave a space on the side of the road where bicycles can travel without going over the humps.



Critical Reasoning 5

Home Assignment

Critical Reasoning 5	Book 1	Class Questions Home Assignment	Revise Class Questions Solve and Review 20 questions	~ 60 minutes	24 20
----------------------	--------	------------------------------------	---	--------------	----------





Thank you