

GRE Prep

Critical Reasoning 2



Critical Reasoning 2

Sample Question

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

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



Critical Reasoning 2

Inspirus “*RIPE*” Strategy for CR Questions:

- Read the argument and simplify it in your own words.
- Identify the key components of the argument; premise, counter-premise, and conclusion.
- Predict an answer based on the type of the question type.
- Eliminate the options that are irrelevant or do not match with the predicted answer.

Critical Reasoning 2

Strengthen vs. Weaken the Argument

In strengthen the conclusion, you are asked to evaluate the answer choices to determine which one would best **support** the author's conclusion. In weaken the conclusion, you are asked to evaluate the answer choices to determine which one would best **weaken** the author's conclusion.



Critical Reasoning 2

Strategy for Strengthen/Weaken the Argument Questions:

1. Read the argument and identify the premise/s and the conclusion.
2. Identify the logical "gaps" and/or common logical fallacies in the argument

Strengthen the Conclusion

- I. Provide an additional support to the premise
- II. Select an answer choice that will fill those logical gaps and correct any flaws, making the conclusion MORE likely to be true. (Validate the assumption)

Weaken the Conclusion

- I. Undermine the premise
 - II. Select an answer choice that will expose those logical gaps and create a flaw, making the conclusion LESS likely to be true. (Invalidate the assumption)
3. You can bring in new information that is outside the scope of the passage.



Critical Reasoning 2

In a cause and effect argument, it is assumed that a certain cause produces a certain effect, but that can be a mere correlation or coincidence.

Example

A study conducted on an age group from 40 to 50 revealed that 85% people who had stress also had high blood pressure. So we can safely conclude that stress causes high blood pressure.

Consider that stress (X) caused high blood pressure (Y). We can weaken this conclusion in the following ways:

I. There was some other cause

- Z caused Y - Smoking, lack of sleep, etc. caused high blood pressure.

II. Reverse the relationship

- Y caused X - High blood pressure caused stress.



Critical Reasoning 2

Strengthen the Argument

1. Medical doctor: Sleep deprivation is the cause of many social ills, ranging from irritability to potentially dangerous instances of impaired decision making. Most people today suffer from sleep deprivation to some degree. Therefore, we should restructure the workday to allow people flexibility in scheduling their work hours.

Which one of the following, if true, would most strengthen the medical doctor's argument?

- A. The primary cause of sleep deprivation is overwork.
- B. Employees would get more sleep if they had greater latitude in scheduling their work hours.
- C. Individuals vary widely in the amount of sleep they require.
- D. More people would suffer from sleep deprivation today than did in the past if the average number of hours worked per week had not decreased.
- E. The extent of one's sleep deprivation is proportional to the length of one's workday.



Critical Reasoning 2

2. Galanin is a protein found in the brain. In an experiment, rats that consistently chose to eat fatty foods when offered a choice between lean and fatty foods were found to have significantly higher concentrations of galanin in their brains than did rats that consistently chose lean over fatty foods. These facts strongly support the conclusion that galanin causes rats to crave fatty foods.

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

- A. The craving for fatty foods does not invariably result in rats choosing those foods over lean foods.
- B. The brains of the rats that consistently chose to eat fatty foods did not contain significantly more fat than did the brains of rats that consistently choose clean foods.
- C. The chemical components are present in both fatty and lean foods.
- D. The rats that preferred fatty foods had higher concentrations of galanin in their brains before they were offered fatty foods.
- E. Rats that metabolize fat less efficiently than do other rats develop high concentrations of galanin in their brains.



Critical Reasoning 2

Weaken the Argument

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, thus, 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 above?

- A. Insurance company statisticians do not believe that moving to Hawaii will significantly lengthen the average Louisianan's life.
- B. The longevity ascribed to Hawaii's current population is attributable mostly to genetically determined factors.
- C. The governor of Louisiana has alleged that statistics for his state are inaccurate.
- 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.



Critical Reasoning 2

4. Beverage company representative: The plastic rings that hold six-packs of beverage cans together pose a threat to wild animals, which often become entangled in the discarded rings and suffocate as a result. Following our lead, all beverage companies will soon use only those rings consisting of a new plastic that disintegrates after only three days' exposure to sunlight. Once we all complete the switchover from the old to the new plastic rings, therefore, the threat of suffocation that plastic rings pose to wild animals will be eliminated.

Which one of the following, if true, most seriously weakens the representative's argument?

- A. The switchover to the new plastic rings will take at least two more years to complete.
- B. The new plastic rings are slightly less expensive than the old rings.
- C. The new plastic rings rarely disintegrate during shipping of beverage six-packs because most trucks that transport canned beverages protect their cargo from sunlight.
- D. The new plastic rings disintegrate into substances that are harmful to aquatic animals when ingested in substantial quantities by them.
- E. After the beverage companies have switched over to the new plastic rings, a substantial number of the old plastic rings will persist in most aquatic and woodland environments.



Critical Reasoning 2

5. In Colorado subalpine meadows, nonnative dandelions co-occur with a native flower, the larkspur. Bumblebees visit both species, creating the potential for interactions between the two species with respect to pollination. In a recent study, researchers selected 16 plots containing both species; all dandelions were removed from eight plots; the remaining eight control plots were left undisturbed. The control plots yielded significantly more larkspur seeds than the dandelion-free plots, leading the researchers to conclude that the presence of dandelions facilitates pollination (and hence seed production) in the native species by attracting more pollinators to the mixed plots.

Which of the following, if true, most seriously undermines the researchers' reasoning?

- A. Bumblebees preferentially visit dandelions over larkspurs in mixed plots.
- B. If left unchecked, nonnative species like dandelions quickly crowd out native species.
- C. Seed germination is a more reliable measure of a species' fitness than seed production.
- D. Soil disturbances can result in fewer blooms, and hence lower seed production.
- E. In mixed plots, pollinators can transfer pollen from one species to another to augment seed production.



Critical Reasoning 2

Flawed Reasoning

The question stem almost always contains a form of the word “flaw” or “fallacy”.

The correct answer will be related to an assumption, but the correction should indicate why it is flawed.

Unlike “Weaken the Conclusion” questions, which present a new piece of information, “Flawed Reasoning” questions attack the logic applied in the Argument.

Weaken the Conclusion questions may contain the word “flaw”.

However, weaken questions contain the expression “if true”. Flaw questions will *not* contain this language.

The most common Trap Options involves:

- Discussing alternatives when we were asked to comment on the given plan
- Brings up a detail or distinction that does not affect the conclusion i.e. IRRELEVANT



Critical Reasoning 2

6. Consumer health advocate: Your candy company adds caffeine to your chocolate candy bars so that each one delivers a specified amount of caffeine. Since caffeine is highly addictive, this indicates that you intend to keep your customers addicted.

Candy manufacturer: Our manufacturing process results in there being less caffeine in each chocolate candy bar than in the unprocessed cacao beans from which the chocolate is made.

The manufacturer's response is flawed as a refutation of the health advocate's argument as it:

- A. fails to address the issue of whether the level of caffeine in the candy bars sold by the manufacturer is enough to keep people addicted
- B. assumes without warrant that all unprocessed cacao beans contain uniform amount of caffeine
- C. does not specify exactly how caffeine is lost in the manufacturing process
- D. treats the consumer health advocate's argument as though it were about each candy bar rather than about the manufacturer's candy in general
- E. merely contradicts the consumer health advocate's conclusion without giving any reason to believe that the advocate's reasoning is unsound



Critical Reasoning 2

Evaluate the Argument

We are asked to find what additional information would help us to try to determine whether the assumption is valid or invalid.

Most Evaluate question stems will contain one of the following:

- Some form of the word “evaluate” OR “determine”
- “What would be “useful to know (or establish)” or “important to know”

The correct answer should be structured in such a way that there are at least two possible “paths”— one path will strengthen the argument, and the other will weaken it.

The most common trap options involve:

- A strategy that, irrespective of the outcome, does not have any direct impact on the author’s conclusion.



Critical Reasoning 2

7. 30% of the residents of Tafta City own cars. However, 70% of the residents of Hampton, a suburb in Tafta City, are car owners. So, it can be concluded that the total number of cars owned by residents of Hampton exceeds the total number of cars owned by other residents of Tafta City.

Which of the following would be most important to determine whether the conclusion is correct?

- A. What is the total population of Tafta City?
- B. What is the total number of cars owned by residents of Tafta City?
- C. What proportion of the population of Tafta City resides in Hampton?
- D. What is the total number of people residing in Hampton?
- E. What proportion of the population of Tafta City has bought cars from outside Tafta City?



Critical Reasoning 2

8. Vargonia has just introduced a legal requirement that student-teacher ratios in government-funded schools not exceed a certain limit. All Vargonian children are entitled to education, free of charge, in these schools. When a recession occurs and average incomes fall, the number of children enrolled in government-funded schools tends to increase. Therefore, though most employment opportunities contract in economic recessions, getting a teaching job in Vargonia's government-funded schools will not be made more difficult by a recession.

Which of the following would be most important to determine in order to evaluate the argument?

- A. Whether the number of qualified applicants for teaching positions in government-funded schools increases significantly during economic recessions
- B. Whether in Vargonia there are any schools not funded by the government that offer children an education free of charge
- C. What the current student-teacher ratio in Vargonia's government-funded schools is
- D. What proportion of Vargonia's workers currently hold jobs as teachers in government-funded schools
- E. Whether in the past a number of government funded schools in Vargonia have had student teacher ratios well in excess of the new limit



Critical Reasoning 2

Parallel Reasoning

Such questions ask you to look for the answer choice that has the closest logical structure as the argument in the question, but with NEW TERMS. Each answer choice is its own argument, as opposed to an assumption, inference, or flaw.

The question-stem will contain phrases like “parallel reasoning,” “most similar reasoning,” “exemplifies,” etc. One of the lengthier types of questions.

Break down the Argument into its Component Parts. What’s the premise? What’s the evidence? Where’s the author’s conclusion? Label the Logic. Describe the Logic in your own words. Evaluate each option separately and see if it matches the logic.

The most common Trap Options involve:

- Options that merely mimic the topic of the argument. The correct answer’s argument usually focuses on an entirely different topic.
- Just because an answer choice contains similar keywords, or has a similar number of sentences, doesn’t mean its logic matches!



Critical Reasoning 2

9. A bullet train travels in excess of 150 miles per hour. Therefore, if a train travels slower than 150 miles per hour, it is not a bullet train.

Which of the following most closely parallels the reasoning used in the argument above?

A. An orange ripens only on the vine. If it ripens on the vine, then it is not an orange.

B. Newspapers are often read by more than one person. Therefore, magazines are also likely to be read by more than one person.

C. An earthquake of 5.0 or above on the Richter scale causes massive damage. If there is not massive damage, then the earthquake did not attain a 5.0 or above.

D. A supersonic plane travels at speeds in excess of Mach 1. If it is not supersonic, then it will travel at speeds below Mach 1.

E. Fluoride generally prevents cavities. If there are no cavities, then there was no fluoride used.



Critical Reasoning 2

10. Established companies concentrate on defending what they already have. Consequently, they tend not to innovate and tend to underestimate the effects of the innovations of others. Which of the following most closely parallels the reasoning used in the argument above?
- A. A highly successful automobile was introduced by the same company that had earlier introduced a model that had been a dismal failure.
 - B. Ballpoint pens and soft-tip markers have eliminated the traditional market for fountain pens, clearing the way for the marketing of fountain pens as luxury or prestige items.
 - C. One of the first models of modern accounting machines, designed for use in the banking industry, was purchased by a public library as well as by banks.
 - D. The inventor of a commonly used anesthetic did not intend the product to be used by dentists, who currently account for almost the entire market for that drug.
 - E. A once-successful manufacturer of slide rules reacted to the introduction of electronic calculators by trying to make better slide rules.



Critical Reasoning 2

Complete The Argument

The LAST line of the argument is incomplete, and we have to find the best option to complete it. Most of these questions contain a conclusion or claim followed by the word “since” or “because” and a blank. In these cases, the arguments are asking us to find some kind of a premise that will support the claim given in the same sentence.

The rare variants may ask you to find an inference or ask you to “illustrate” or “provide an example of” something that was discussed in the argument.

The most common Trap Options involve:

- Reverse Logic: The option does the opposite of what is expected from it.
- No Tie to Conclusion: The option is not connected to the conclusion / claim made in the argument.



Critical Reasoning 2

11. Manufacturers are now required to make all cigarette lighters child-resistant by equipping them with safety levers. But this change is unlikely to result in a significant reduction in the number of fires caused by children playing with lighters, because children given the opportunity can figure out how to work the safety levers and _____.
- A. the addition of the safety levers has made lighters more expensive than they were before the requirement was instituted
 - B. adults are more likely to leave child-resistant lighters than non-child-resistant lighters in places that are accessible to children
 - C. many of the fires started by children are quickly detected and extinguished by their parents
 - D. unlike child-resistant lighters, lighters that are not child-resistant can be operated by children as young as two years old
 - E. approximately 5,000 fires per year have been attributed to children playing with lighters before the safety levers were required



Critical Reasoning 2

Boldfaced Question

In these questions either a portion of one sentence or two sentences are highlighted/made bold. You are supposed to identify:

- Role these portions play in relation to each other.
- Role these portions play in the argument

Strategy for the Boldface Questions

1. Read the entire argument.
2. Classify the boldface portions into: premise or fact / opinion / conclusion.
3. After classifying the boldface portions, establish the relationship between them.
4. Eliminate options that do not:
 - correctly classify the boldface portions.
 - correctly establish the relationship between the two boldface portions.



Critical Reasoning 2

Important points to be remembered for Boldface questions

- A fact or premise can also be called assertion, evidence, proof, supposition, data, information, research, consideration, pattern, explanation, justification, situation, circumstance etc.
- A conclusion can also be known as judgment, opinion, view, suggestion, idea, belief, proposal, warning, forecast, claim, stand, prediction, hypothesis, position, main point, contention etc.



Critical Reasoning 2

12. A product that represents a clear technological advance over competing products can generally command a high price. Surprisingly, perhaps, **the strategy to maximize overall profits from a new product is to charge less than the maximum price the market will bear.** Many companies charge the maximum possible price for such a product because they want to make as much profit as they can, and technological advances tend to be quickly surpassed. The drawback is that **large profits on the new product give competitors an incentive to quickly develop a product to match the rival product's capabilities.**

In the argument above, the two portions in boldface play which of the following roles?

- A. The first is the position that the argument advocates; the second presents grounds for rejecting an alternate position.
- B. The first is the position that the argument advocates; the second is an alternative position that the argument rejects.
- C. The first presents a strategy for achieving a certain goal, the second presents a drawback to that strategy.
- D. The first presents a strategy for achieving a certain goal, the second presents grounds for preferring a different goal.
- E. The first presents a strategy that, according to the argument, is ineffective; the second presents a way of improving the effectiveness of that strategy.



Critical Reasoning 2

13. Consumer advocate: It is generally true, at least in this state, that lawyers who advertise a specific service charge less for that service than lawyers who do not advertise. It is also true that **each time restrictions on the advertising of legal services have been eliminated, the number of lawyers advertising their services has increased and legal costs to consumers have declined in consequence**. However, eliminating the state requirement that legal advertisements must specify fees for specific services would almost certainly increase rather than further reduce consumer's legal costs. Lawyers would no longer have an incentive to lower their fees when they begin advertising and **if no longer required to specify fee arrangements, many lawyers who now advertise would increase their fees**.

In the above argument, the two portions in boldface play which of the following roles?

- A. The first is a generalization that the consumer advocate accepts as true; the second is presented as a consequence that follows from the truth of that generalization.
- B. The first is a pattern of cause and effect that the consumer advocate argues will be repeated in the case at issue; the second acknowledges a circumstance in which that pattern would not hold.
- C. The first is evidence that the consumer advocate offers in support of a certain prediction; the second is that prediction.
- D. The first is pattern of cause and effect that the consumer advocate predicts will not hold in the case at issue; the second offers a consideration in support of that prediction.
- E. The first acknowledges a consideration that weighs against the main position that the consumer advocate defends; the second is that position.



Critical Reasoning 2

14. A prominent investor who holds a large stake in the Burton Tool company has recently claimed that **the company is mismanaged**, citing as evidence the company's failure to slow production in response to a recent rise in its inventory of finished products. It is doubtful whether an investor's sniping at management can ever be anything other than counterproductive, but **in this case, it is clearly not justified**. It is true that an increased inventory of finished products often indicates that production is outstripping demand, but in Burton's case it indicates no such thing. Rather, the increase in inventory is entirely attributable to products that have already been assigned to orders received from customers.

In the argument given, the two boldfaced portions play which of the following roles?

- A. The first states the position that the argument as a whole opposes; the second provides evidence to undermine the support for the position being opposed.
- B. The first states the position that the argument as a whole opposes; the second is evidence that has been used to support the position being opposed.
- C. The first states the position that the argument as a whole opposes; the second states the conclusion of the argument as a whole.
- D. The first is evidence that has been used to support a position that the argument as a whole opposes; the second provides information to undermine the force of that evidence.
- E. The first is evidence that has been used to support a position that the argument as a whole opposes; the second states the conclusion of the argument as a whole.



Critical Reasoning 2

Additional Questions

15. In response to viral infection, the immune systems of mice typically produce antibodies that destroy the virus by binding to proteins on its surface. Mice infected with a herpesvirus generally develop keratitis, a degenerative disease affecting part of the eye. Since proteins on the surface of cells in this part of the eye closely resemble those on the herpesvirus surface, scientists hypothesize that these cases of keratitis are caused by antibodies to herpesvirus.

Which of the following, if true, gives the greatest additional support to the scientists' hypothesis?

- A. Other types of virus have surface proteins that closely resemble proteins found in various organs of mice.
- B. There are mice that are unable to form antibodies in response to herpes infections, and these mice contract herpes at roughly the same rate as other mice.
- C. Mice that are infected with a herpesvirus but do not develop keratitis produce as many antibodies as infected mice that do develop keratitis.
- D. There are mice that are unable to form antibodies in response to herpes infections, and these mice survive these infections without ever developing keratitis.
- E. Mice that have never been infected with a herpesvirus can sometimes develop keratitis.



Critical Reasoning 2

16. 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 antitheft 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 car than for others.



Critical Reasoning 2

17. 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%. 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 2

18. Profits for one of Company X's flagship products have been declining slowly for several years. The CFO investigated and determined that inflation has raised the cost of producing the product but consumers who were surveyed reported that they weren't willing to pay more than the current price. As a result, the CFO recommended that the company stop producing this product because the CEO only wants products whose profit margins are increasing.

The answer to which of the following questions would be most useful in evaluating whether the CFO's decision to divest the company of its flagship product is warranted?

- A. Does Company X have new and profitable products available to replace the flagship product?
- B. Will the rest of Company X's management team agree with the CFO's recommendation?
- C. Are there additional features which could be added to the product and for which consumers might be willing to pay a higher price?
- D. Is there a way to alter the manufacturing or distribution processes in order to reduce the cost to produce the flagship product?
- E. What percentage of Company X's revenues is represented by sales of the flagship product?





Thank you