GRE® STRATEGY SESSION 2

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The Verbal Section

In-Depth

& *With a Brief Discussion of the Essays*

What is Critical Reasoning ?

Critical Reasoning questions are composed of short reading passages. Typically they are one paragraph long…followed by a series of question about the authors argument.

You should expect to see anywhere from 2 to 4 Critical Reasoning questions within the two verbal sections

It consists of a passage …the questions…5 answer choices

Passages are short. Take form of an argument.

The subjects are usually hypothetical scenarios.

The Passage

Read the passage carefully, pay attention to the language employed and interpret that language LITERALLY.

Be precise when reading the passage for Critical Reasoning questions.

There are eight types of critical reasoning questions…each involves a different task with respect to the passage

Most passages will test your ability to evaluate reasoning employed in an argument.

VERY IMPORTANT GRE CRITICAL REASONING TIPS

KNOW YOUR JARGONS.

Know the definition for terms like assumption, inference, evidence, conclusion, logical flaw, paradox, etc., like the back of your hand. As you go through practice tests, write down any words in the argument, question stem, or answer choice that confuse you and then look them up!

When you have the essential definitions down, you can jump into arguments much more quickly and you won't waste any time second-guessing what a question is asking you to find.

IDENTIFY THE DIFFERENT PARTS OF EACH CR PASSAGE.

If you're having a hard time sorting out the meaning of a passage, take a moment to identify its conclusion and the evidence (statements of fact) and assumptions (unstated ideas) it uses to make that conclusion (the conclusion will often be signaled by words like "as a result" or "therefore").

Once you break down an argument into its component parts, it's easier to see what purpose each component serves. This structural approach is key when you're asked to strengthen, weaken, or paraphrase specific claims.

DON'T CONFUSE CORRELATION WITH CAUSATION.

This is a common logical flaw, and it occurs when an argument concludes that one event *caused* another, based only on the evidence that the two occurred *at the same time* or one after another. Don't be fooled!

The GRE will throw the same flawed logic at you again and again to test your knowledge of sound reasoning. If you know the go-to flaws ahead of time, you can jump to the right answer more quickly (and avoid the traps more easily!).

CHECK FOR OPPOSITE ANSWER CHOICES.

If a question asks you for a statement that best *weakens* an argument, beware of answer choices that do the exact opposite (i.e. strengthen the argument). Opposite answers are actually incredibly tempting because they mirror correct answers in force.

The test-makers bank on the fact that your attention will slip just for a second and you'll pick the opposite of the right choice. If you're on the lookout for this trick, you'll be less likely to fall for it.

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GET GRIP ON THE MOST FREQUENTLY USED METHODS OF REASONING.

Arguments cite many types of evidence, but certain methods of reasoning are more effective than others and thus more commonly used on the GRE. An author might advance her points by *citing an authority* (like a study or scholar) or *providing an analogy*(appealing to a similar situation). Common methods of countering an argument including *noting ulterior motives* or demonstrating a *logical inconsistency*.

This is another example where identifying the structure of an argument can save you time. If you understand an author's method of reasoning, it's easier to identify where the argument is flawed and how you could strengthen or weaken it if a question asked you to do so.

How Arguments are Constructed

Most CR passages take the form of ARGUMENTS in which the writer tries to convince the reader of something.

So, the GRE consists of 3 connected parts:

- Conclusion: what the author tried to persuade the reader to accept

- Premise: evidence provided in support of the conclusion

- Assumption: unstated ideas upon which an argument's validity rests

Conclusions

The conclusion is the primary claim made in an argument. The easiest way to identify the conclusion is to ask yourself what its author want you to believe.

During the past 10 years, advertising revenues for the magazine *True Investor* have fallen by thirty-percent. The magazine has failed to attract new subscribers, and newsstand sales are at an all-time low. Thus, the sweeping changes to the editorial board will be necessary for the magazine to survive.

In the argument above , the conclusion is found in the last sentence…it is when the author attempts to persuade the reader that *sweeping changes to the editorial board will be necessary for the magazine to survive.*

Words that best indicate where to find the conclusion:

Therefore

Clearly

Thus

Hence

Consequently

So

Premises

The Premises of an argument include any reasons, statistics, or other evidence provided in the support of the conclusion. In the GRE you must accept the truth of the premises, whether you agree with them or not. So…the easiest way to identify the premises is to ask what information the author provided to justify the truth of the conclusions:

During the past 10 years, <u>advertising revenues for the magazine *True Investor* have fallen by thirty-percent. The magazine has failed to attract new subscribers, and newsstand sales are at an all-time low</u>. Thus, the sweeping changes to the editorial board will be necessary for the magazine to survive.

As you an see the premises is found in the first two sentences where the author is providing three pieces of evidence in support of the conclusion.

Words that best indicate where to find the premises:

Because

Given that

As a result

In view of

Since

Supposing that

Assumptions

Assumptions are unstated premises on which the author relies to prove his/her conclusion. Even well-reasoned arguments rest on the assumptions; because it's impossible to say everything, some things must go unsaid.

Therefore, assumptions play a crucial role in the structure of an argument, bridging gaps in reasoning form the premise to the conclusion.

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During the past 10 years, advertising revenues for the magazine _True Investor_ have fallen by thirty-percent. The magazine has failed to attract new subscribers, and newsstand sales are at an all-time low. Thus, the sweeping changes to the editorial board will be necessary for the magazine to survive.

So the argument assumes that the editorial board **caused** the problems

Now, had the local population declined by 30% then sweeping changes to the board might to little to help.

In that case, the connection between the premises(the magazine's problem) and the conclusion(changes in the editorial board) would fall apart.

The easiest way to identify an assumption is to distinguish an argument's conclusion from it premises. Then ask what additional information is required to link the C & P

Basic Approach

Step 1: Identify the Questions

Look for words or phrases in the question stem that can be used to identify the question type. Your knowledge of the question type informs your approach to the passage, so always read the question stem before you read the passage.

Assumption Questions:
What they typically ask:
- The argument assumes which of the following ?
- The author of the argument presupposes which of the following to be true?
- Which of the following is a assumption on which the truth of the author's conclusion depends ?

Weaken Questions

Ask you to find a reason why the information in the passage could be wrong, or incomplete.

What they ask:

- Which of the following, if true, most seriously <u>weakens</u> the argument above?
- Which of the following casts the most <u>doubt</u> on the author's conclusion?
- Which of the following calls into question the reasoning above ?

Strengthen Questions

Here they require you to **reinforce** an argument's conclusion. This is done by strengthening one of the argument's assumptions. So identify the assumption and make it stronger

Strengthen questions ask:

- Which of the following provides the best <u>support</u> for the claims made above?
- Which of the following statements, if true, most <u>strengthens </u>the argument's conclusion?
- Which of the following, if true, <u>increases</u> the likelihood that the author's claim is true?

Other Questions:

Evaluate:
This asks you to determine whether you are looking for a weak or strong argument

Inference:
The correct answer is essentially the conclusion to the evidence given by the question…so get to really know the information provided

Step 2:
Work the Argument

For most of the question types, begin working an argument by distinguishing its conclusion for it premises. Then look for shifts in language or reasoning patterns that can help you identify the arguments assumption.

Step 3: Predict what you should Do

It can be difficult to outright predict the answer, but you may be able to predict what the answer should do. Before going to the answer choices, use your knowledge of the question and the information you read to determine what the correct answer needs to accomplish.

Step 3: Use POE to find the answer

OK, so you did most of the work…you are confident of what they're asking through the question type and now you need to eliminate what doesn't make sense first.

Critical Reasoning in Summary

	Keyword Triggers	Answer Is	Focus On	Tips
(S)	• **Strengthen** • Justify • Explain • Assumption	Premise	Conclusion (or Paradox or Plan)	• New relevant info • Need not prove • Link premises to specific conclusion
(W)	• **Weaken** • Undermine • Challenge • Cast doubt • Flaw in logic	Premise	Conclusion, gap in logic	• Reflect: how to criticize • Expose gap in logic • Need not disprove
(I)	• **Inference**/Conclusion • Must be true	Conclusion	Premises in stimulus	• Correct answer must be true • Others not necessarily true
(M)	• **Method** of Reasoning • Argument technique, • Flaw in logic • Discrepancy • Proceeds by • **Boldfaced** sentences	Description of the author's logic	Description of the author's logic	• Find accurate description of the logic (or flaw) • Eliminate answers inconsistent with stimulus

7. **Alonso:** The introduction of a new drug into the marketplace should be contingent upon our having a good understanding of its social impact. However, the social impact of the newly marketed antihistamine is far from clear. It is obvious, then, that there should be a general reduction in the pace of bringing to the marketplace new drugs that are now being created.

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

(A) The social impact of the new antihistamine is much better understood than that of most new drugs being tested.

(B) The social impact of some of the new drugs being tested is poorly understood.

(C) The economic success of some drugs is inversely proportional to how well we understand their social impact.

(D) The new antihistamine is chemically similar to some of the new drugs being tested.

(E) The new antihistamine should be next on the market only if most new drugs being tested should be on the market also.

LEARNING BY DOING

Generalization

The argument in this problem contains a glaring case of another common logical fallacy: generalization. Simplified into syllogism structure, the argument reads as follows:

Major Premise: Drugs should not be brought to market if their social understanding is poor.

Minor Premise: The social understanding of one drug is poor.

Conclusion: We should stop bringing all drugs to the market.

This broad, sweeping conclusion is based on one isolated instance, so clearly the argument is quite weak. What is a great way to improve generalization? Show that the one example is typical of most. Answer choice A does exactly that, showing that most drugs being brought to marketplace are worse than the antihistamine and thus greatly strengthening the argument.

8. If Shero wins the election, McGuinness will be appointed head of the planning commission. But Stauning is more qualified to head it since he is an architect who has been on the planning commission for 15 years. Unless the polls are grossly inaccurate, Shero will win.

Which one of the following can be properly inferred from the information above?

(A) If the polls are grossly inaccurate, someone more qualified than McGuinness will be appointed head of the planning commission.

(B) McGuinness will be appointed head of the planning commission only if the polls are a good indication of how the election will turn out.

(C) Either Shero will win the election or Stauning will be appointed head of the planning commission.

(D) McGuinness is not an architect and has not been on the planning commission for 15 years or more.

(E) If the polls are a good indication of how the election will turn out, someone less qualified than Stauning will be appointed head of the planning commission.

LEARNING BY DOING

Inferences Must Be True

This question provides an excellent illustration of the "must be true" Inference question standard. While the facts do show that Shero, if elected, will appoint a less-qualified planning commissioner, McGuinness, there is nothing explicit that says Stauning would even be considered under any other regime. You may think that Shero is the only person who would appoint McGuinness, but there is no evidence given for that. The only thing we know here is that a Shero win means that McGuinness, a lesser planning commissioner than Stauning, will be appointed. So while options like answer choice A (if Shero loses, a better commissioner will be appointed) and answer choice B (Shero is McGuinness's only hope to get the job) may seem probable, they are not necessarily true.

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On a question like this, you can eliminate incorrect answer choices by proposing hypotheticals that are consistent with the facts but undermine the answer choice. To eliminate answer choices A, B, and C here the hypothetical "for some reason, anyone who wins will select McGuinness" undercuts all of those answer choices. Only answer choice E is necessarily true.

9. **Treasure Hunter:** In general, archaeological artifacts found on public property cannot legally be privately owned. But according to centuries-old maritime law, people who risk their lives attempting to rescue a ship in peril are permitted to keep whatever cargo they can salvage. Under this rule treasure hunters clearly are entitled to keep the cargo from ancient shipwrecks that they risk their lives to save from oblivion in public waters.

Archaeologist: Not so. These shipwrecks have stabilized over the centuries they have lain underwater. The only danger they are in is from greedy treasure hunters who destroy archaeological evidence in their hurry to loot salable artifacts.

On the evidence of their statements, it can be concluded that the treasure hunter and the archaeologist disagree on which of the following?

(A) What constitutes an archaeological artifact

(B) In what sense, if any, an ancient shipwreck can be said to be in peril

(C) Whether treasure hunters risk their lives when they retrieve artifacts from ancient shipwrecks

(D) Whether maritime law can ever be applied to a ship that has already sunk

(E) Whether antique shipwrecks in public waters can properly be said to be on public property

LEARNING BY DOING

Don't Be Baited into Generalization

Remember: The correct answer on an Inference question must be true. And the previous question provides an excellent example of that. The treasure hunter and archaeologist may well disagree on many grounds, but we can only answer the question based on what is explicitly in the passage. And the key to that lies with the archeologist's rebuttal: "The only danger (these shipwrecks) are in is from greedy treasure hunters…." He chooses to rebut the claim that the ships are in any real danger, having already sunk long ago, meaning that he clearly disagrees with the assertion that they are in peril. Answer choice B, then, must be true.

Answer choice D, while it may seem clear as a point of disagreement in this case, is not necessarily true overall. It is simply too broad, as the argument as stated only pertains to ancient shipwrecks that have long since settled. To say that they necessarily disagree whether the law can "ever" apply to "any ship that has already sunk" ignores plenty of possibilities with recently sunk ships or other aspects of the maritime law code. Answer choice D makes the mistake of generalization, but does so by subtly drawing a broad conclusion to an argument in which narrow circumstances are given. Beware the overly broad conclusion in Inference questions.

11. There are those who complain that municipal libraries are outdated and unnecessary. **These same people object to the tax dollars spent funding municipal libraries.** However, these people are missing out on a simple pleasure: reading a great book. **Taken this way, libraries are truly wonderful resources worthy of public funding.**

The two boldface portions play which of the following roles?

(A) The first is a generalization accepted by the author as true; the second is a consequence that follows from the truth of that generalization.

(B) The first is evidence that supports one of two contradictory points of view; the second is the second point of view.

(C) The first is a commonly held point of view; the second is support for that point of view.

(D) The first is one of two contradictory points of view; the second is the other point of view.

(E) The first concedes a consideration that weighs against the viewpoint of the author; the second is that viewpoint.

LEARNING BY DOING
Understand Argument Structure

As you can see from this example, success with roles in boldface questions depends heavily on your ability to properly identify premises and conclusions. Remember from the Foundations of GMAT Logic lesson that everything in an argument must be a premise, a conclusion, or contextual information. If you are unsure about the role of one piece of information, employ the "why?" test. If you use that test on this difficult question, it is likely that you will get it correct. The two boldface sections are each conclusions, and here is how you know: Ask why do "**These same people object to the tax dollars spent funding municipal libraries**"? Because libraries are outdated and unnecessary. As you can see, the first sentence (not boldface) is the premise for the conclusion (boldface). Again for the second **boldface** portion ask why **"are libraries truly wonderful resources worthy of public funding."** Because of the pleasure of reading a book. The third sentence (not boldface) is the premise for the conclusion (that is boldfaced). Since each **boldface** section is a conclusion, the correct answer is answer choice D. Both answer choices B and E incorrectly describe the first **boldface** portion as a premise when it is really a conclusion.

14. Raisins are made by drying grapes in the sun. Although some of the sugar in the grapes is caramelized in the process, nothing is added. Moreover, the only thing removed from the grapes is the water that evaporates during the drying, and water contains no calories or nutrients. The fact that raisins contain more iron per food calorie than grapes do is thus puzzling.

Which one of the following, if true, most helps to explain why raisins contain more iron per calorie than do grapes?

(A) Since grapes are bigger than raisins, it takes several bunches of grapes to provide the same amount of iron as a handful of raisins does.

(B) Caramelized sugar cannot be digested, so its calories do not count toward the food calorie content of raisins.

(C) The body can absorb iron and other nutrients more quickly from grapes than from raisins because of the relatively high water content of grapes.

(D) Raisins, but not grapes, are available year-round, so many people get a greater share of their yearly iron intake from raisins than from grapes.

(E) Raisins are often eaten in combination with other iron-containing foods, while grapes are usually eaten by themselves.

LEARNING BY DOING

Isolate the Paradox and Find the Missing Link

In this example, you learn that when grapes are turned into raisins, no nutrients are gained or lost, and the only major change is that some sugar is caramelized. You then learn that somehow the iron per food calorie has increased during this process. But how can that be? This is the paradox that you should isolate instead of the normal conclusion on a Strengthen question: How can iron per food calorie increase when no nutrients are gained or lost and the only change is that sugar is caramelized? There must be some missing link that allows these seemingly contradictory statements to stand, and that is what you look for in the answer choices—a new piece of information that when added to this stimulus removes that paradox and logically links the two statements. Notice the importance of reading the "conclusion" (which in this case is the paradox) carefully. The entire paradox deals with "iron per calorie"—not iron per second, iron per year, iron per meal, or iron per handful, as some of the answer choices seek to explain. If the calories from caramelized sugar do not count toward the caloric value, thereby reducing the denominator of that fraction and increasing the overall value, then you can understand how that ratio increased. No iron was gained (what your brain naturally tries to explain) but the calories are no longer counted, so answer choice B is correct.