

Macjas – Critical Reasoning Strategies

1. MUST BE TRUE/INFERENCE:

E.g. If the statements above are true, which one of the following must also be true?

E.g. Which of these statements can be properly inferred?

On these types of questions, if the stimulus does not contain an argument by the author but contains assertions by others, you can safely eliminate answer choices that contain assertions. Since the author makes no assertions, you cannot properly infer an assertion.

POSSIBLE WRONG ANSWERS:

- Choices that COULD or LIKELY be true but not DEFINITELY be true.
- Exaggerated answers: choices that generalize for example if the stimulus states some and the answer choice states all.
- Out of scope or choices that introduce new pieces of information.
- Opposite answers: remember in logic, not wet $\neq$ dry.

POSSIBLE CORRECT ANSWERS:

- Answers that restate the stimulus in different terms
- Answers that combine two or more statements in the stimulus.

2. MAIN POINT QUESTIONS:

E.g. Which statement most accurately expresses the conclusion above?

E.g. Which statement most accurately expresses the main argument/main point?

These questions ask you to rephrase the conclusion of the stimulus.

POSSIBLE WRONG ANSWERS:

- Answers that are true but don't reflect the conclusion
- Answers that repeat a premise from the stimulus.

3. WEAKEN THE ARGUMENT:

Focus on the conclusion, since all correct weaken the argument impacts the conclusion. The information in the stimulus is suspect. Also, ideas from outside the stimulus can be brought in to weaken the argument.

POSSIBLE WRONG ANSWERS:

- Opposite answers that strengthen the argument.
- Out of scope choices that have no effect on the conclusion.
- Answers that seem to weaken the argument BUT generalize
E.g. A conclusion states that a new plastic will prevent animals suffocating. The misleading answer is: "but the new plastic is toxic to water animals."
This wrong answer is generalizing because the conclusion is about animal suffocation, NOT poisoning.

POSSIBLE RIGHT ANSWERS:

- An answer that brings in a new idea/premise that the author didn't think about.

4. CAUSE & EFFECT REASONING:

These types of questions usually state a cause & effect relationship in either the premise or the conclusion. Look for phrases such as: caused by, because of, leads to, determined by etc. Usually when the causality statement is on the conclusion it is almost always wrong. More importantly though, when a GMAT author makes a causality statement, ***he or she believes that the only cause is the one stated.***

POSSIBLE RIGHT ANSWERS TO WEAKEN THE ARGUMENT:

- Find an alternate cause to the effect
- Show that the relationship is a correlation not a causality
- Show that the effect happens without the cause or vice versa
- Show the relationship is reversed
- Show a statistical problem exists with the data used to make the causal statement.

POSSIBLE RIGHT ANSWERS TO STRENGTHEN THE ARGUMENT:

- An answer that does not provide an alternate choice to the effect
- An answer choice that does not show the causal relationships to be false
- An answer choice that does not reverse the causality
- An answer choice that DOES give statistical data in favor of the causality.

5. STRENGTHEN THE ARGUMENT:

As in weaken the argument, focus on the conclusion and consider the information in the stimulus suspect. Ideas from outside the stimulus can be brought in to strengthen the argument.

POSSIBLE WRONG ANSWERS:

- Opposite answers that weaken the argument
- Out of scope choices that have no effect on the conclusion

6. FIND THE ASSUMPTION:

There are two types of assumptions:

SUPPORTER ASSUMPTIONS: If the conclusion has a new element in it that is not mentioned in the premise, most likely, the author made a supporter assumption. Look for answer choices that reflect this new element to fill in the logic gap.

E.g. Art is often shocking. We should use public funds to support art.

Assumption: Public funds should support art ('public funds' is the new element)

E.g. All male citizens of Athens can vote. Therefore, Socrates can vote.

Assumption: Socrates is a male citizen on Athens. (Socrates is the new element)

DEFENDER ASSUMPTIONS: These types of assumptions protect the argument by eliminating ideas that could weaken the argument. Usually you can spot these by noticing that no new element exists in the conclusion. ***In GMAT world, when an author makes an absolute conclusion he believe that NO other possible explanation exists.*** There can be a lot of assumptions relating to a defender assumption so it is not worth trying to guess the assumption before looking at the answer choices.

E.g. People who read a lot are more intelligent than other people. Thus, reading must cause a person to be intelligent.

Assumption: Sleeping does not cause you to be more intelligent
Assumption: Eating does not cause you to be more intelligent
Assumption: Going to church does not cause you to be more intelligent

ASSUMPTION NEGATION TECHNIQUE:

If you make an assumption answer choice logically opposite and it weakens the conclusion then it is the correct assumption. There will be only ONE choice that will weaken a GMAT argument. If you find two choices that weaken the argument when negated, you have made a mistake.

Use these words to create logically opposite constructs:

KEYWORD	LOGICAL OPPOSITE
All	Not all
Some	None
Always	Not Always
Sometimes	Never
X	Not necessarily X

7. RESOLVE THE PARADOX:

These questions have two pieces of information that are in conflict. You won't usually see a conclusion in these question types.

POSSIBLE WRONG ANSWERS:

- Answers that only address one of the two points in the paradoxical structure.
- Answers that point out similarities in the stimulus when the stimulus states the differences.
- The opposite of the above point.

POSSIBLE RIGHT ANSWERS:

- Answers that address **BOTH** sides of the paradox

8. METHOD/FLAW IN REASONING:

These types of questions require focus on the argument structure rather than the details. Studying these question types is very important because the skills learnt from doing these types of questions helps one's critical reasoning skills to improve. The stimulus may contain valid or flawed arguments.

POSSIBLE WRONG ANSWERS:

- Answers that have elements that are absent from the stimulus (new elements).
- Answer choices that address one part of the premise/conclusion correctly but address another part incorrectly.
- Exaggerated answers; for example, the author states a probability and the answer choice states an eventuality.
- Reverse answers; that reverse for example, the role of the premise and conclusion.

9. PARALLEL REASONING:

Focus on matching key words in the premises and conclusion e.g. most, more, all, none. Focus on matching words in the conclusion e.g. likely that, most, more, definitely, surely, etc. Focus on the relationship between the premise and conclusion: Is it cause and effect? Is it correlation? Is it circular? If there is more than one premise, look to see each premise's relationship to the conclusion. Can both premises alone lead to the conclusion? Does one premise lead to another premise (or sub conclusion) which leads to the conclusion?

Try and create an abstract relationship between the premise and conclusion:

E.g. An audit found no indication of tax avoidance on the part of the firm. Therefore, no such problem exists.

Abstract: When X is not present, or indicated, then X cannot exist/be true.

E.g. Because of teacher hiring freezes, the quality of education will not improve. Therefore, it will surely fall.

Abstract: Because of premise, X will not improve, therefore X will fall.

POSSIBLE WRONG ANSWERS:

- Answer choices with the same subject matter as the stimulus are almost always incorrect. This does not mean that you should not consider them; just be wary of them.

10. PERCENTAGES & NUMBERS:

Common erroneous assumptions:

1. %↑ leads to number↑
2. %↓ leads to number↓
3. Number ↑ leads to %↑
4. Number↓ leads to %↓
5. A large % means a large number
6. A large number means a large %

If the stimulus contains only percentages, avoid answer choices that contain numbers and vice versa.

If the stimulus has both numbers and percentages, any answer choice that has both may be true.

11. BOLDFACE QUESTIONS:

E.G In the argument above, the two boldface statements play what role?

These questions are basically method/flaw in reasoning type questions in a different flavor.

1. Remember to identify the Argument. Is the Argument supporting something or weakening something?
2. Look at the first boldface sentence and determine whether it is a Claim, Judgment, Evidence or Conclusion.
3. Do the same for the second boldface.
4. Establish the relationship between the two. For example, the first may support the second which, is a conclusion. Or the first is a judgment and the second is evidence provided in support of that judgment.
5. Then focus on the overall structure. How do the Argument, Boldface 1 and Boldface 2 relate?
6. Eliminate answer choices that make errors in identifying the purpose of the boldface. For example, if the first boldface is providing evidence, eliminate all choices that state that the first boldface is a conclusion or claim.
7. With the remaining choices look carefully to match what the relationships are. Usually at this point, you will have to match the Argument or Conclusion with the two boldfaces.