

GMAT Verbal

Critical Reasoning: Assumption Questions

TestVerbal

CR: Question Types

Most common question types

- *Assumption*
- *Strengthen*
- *Weaken*
- *Inference*

Less common question types

- *Paradox*
- *Mimic Argument*
- *Evaluate Argument*
- *Argument Structure*
- *Other types*

Assumptions

- *An **assumption** is an unstated (assumed) premise that is absolutely necessary for the conclusion to follow from the stated premises.*
- *Assumption is not stated in the text, but we can trace in the conclusion of the argument. In other words, the author used this assumption to come to the given conclusion and we can reconstruct the assumption by analyzing the argument (comparing conclusion and premises).*
- *We make thousands of assumptions in daily life (they make sense because they have context and we have experience with the way the world works).*

Example

Premise: All male citizens of Athens had the right to vote.

Assumption: Socrates was a male citizen of Athens.

Conclusion: Therefore, Socrates had the right to vote in Athens.

Assumption Sample Question

1. For several consecutive years, poultry prices at each of three statewide grocery-store chains have exceeded the national average by about fifty percent. Also, the per-pound difference in poultry prices among the three stores never amounted to more than a few pennies, while among grocery stores in other states, the prices varied by nearly a dollar over the same period. The three chains must have conspired to not compete among themselves and to fix their poultry prices at mutually agreed-upon levels.

The claim that the three grocery-store chains conspired to fix poultry prices rests on which of the following assumptions for the time period referred to above?

- (A) No other grocery store charged higher prices for poultry other than the three chains.
- (B) Average poultry prices in the state where the three chains operate exceeded the national average.
- (C) The price that grocery stores paid for poultry did not vary significantly from state to state.
- (D) Consumers in the state where the three chains operate generally prefer poultry over other meats, even if poultry is more expensive than other meats.
- (E) Other grocery stores operating in the same state as the three chain also sell poultry to consumers.

Assumption Questions Sample

1.

(C) Correct answer

Assumption Questions Stems

Which of the following is assumed by the author?

Upon which one of the following assumptions does the author rely?

The argument depends on the assumption that...

Which one of the following, if added to the passage, will make the conclusion logical?

The validity of the argument depends on which one of the following?

The argument presupposes which of the following?

...

The Negation Method

- *The negation method is used to test assumptions*
- *Negate (invert) the assumption and place it in the argument. If the argument doesn't hold valid, the assumption is correct.*

Premise: All male citizens of Athens had the right to vote.

Assumption: Socrates was a male citizen of Athens

Conclusion: Therefore, Socrates had the right to vote in Athens.

To test our assumption we negate it and insert into the argument:

Premise: All male citizens of Athens had the right to vote.

Assumption: Socrates **was not** a male citizen of Athens

Conclusion: Therefore, Socrates had the right to vote in Athens. (**absurd!**)

The argument is ruined. Our assumption is correct.

The Negation Method

Another example

*Juan has been practicing tennis 3 hours each day for the past 2 years.
Therefore, Juan will win the city championship next month.*

Premise: J practicing tennis 3 hrs/day for 2 yrs

Assumption: J lives until championship

Assumption: Nothing will stop championship

Assumption: J is eligible to play

Conclusion: J will win championship

Let's test the third assumption using the negation technique:

Premise: J practicing tennis 3 hrs/day for 2 yrs

Assumption: J is not eligible to play

*Conclusion: J will win championship (**absurd!**)*

The argument is ruined. Our assumption is correct.

Assumptions

$$P + \underline{\quad} \rightarrow C$$

↑
A

Premise: Andrew weighs less than 200 pounds.

Conclusion: Therefore, he cannot have a successful career as a racecar driver.

Assumption: In order to have a successful career as a racecar driver, one must weigh at least 200 pounds.

Assumptions

$$\begin{array}{c} \mathbf{P} + \mathbf{P} \rightarrow \mathbf{C} \\ \uparrow \\ \mathbf{A} \end{array}$$

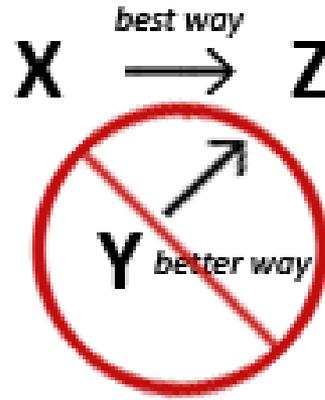
Argument:

Sidney's get-rich-quick scheme is sure to succeed. He will buy undervalued properties in foreclosure. Then he will resell the properties to local real estate developer and generate large profits.

Assumption: The undervalued properties in foreclosure actually exist and Sidney can find them.

Assumption: Local real estate developers will want to buy such properties from Sidney and will be willing to pay more than he paid in the first place.

Assumptions



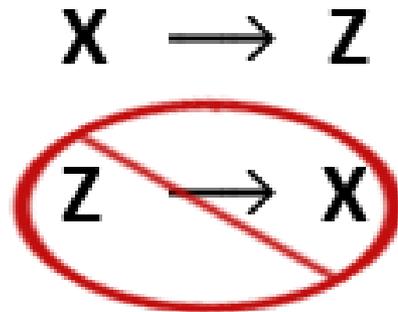
Argument:

A magazine published an article proclaiming that one can get a promotion by playing golf with one's boss. Kevin concludes that the best way for him to get promoted is to take golf lessons and join his boss's country club.

Assumption: There is no better way for Kevin to get promoted than to play golf with his boss.

Assumption: Kevin's boss plays golf.

Assumptions



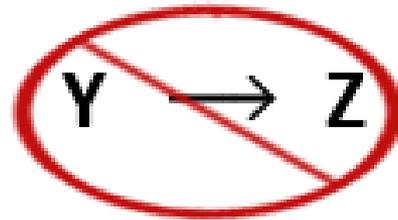
Argument:

Economists have noticed that countries with more developed cultures of entrepreneurship and risk-taking have higher economic growth rates. Therefore, they have concluded that cultures of entrepreneurship and risk-taking generate higher rates of growth over time.

Assumption: Higher growth rates in an economy do not contribute to a more highly developed culture of entrepreneurship and risk-taking.

Assumptions

only $X \rightarrow Z$



Argument

People who read a lot are more intelligent than other people. Thus, one must read a lot in order to be intelligent.

Assumptions

Sleeping more than eight hours does not cause a person to be intelligent.

Regular exercise does not cause a person to be intelligent

A high-protein diet does not cause a person to be intelligent.

Genetics does not cause a person to be intelligent.

Assumption Questions: Strategy

- 1. Identify and summarize the conclusion*
- 2. Identify and summarize the premises.*
- 3. Try to identify some unstated assumptions*
 - sometimes assumptions are obvious*
 - sometimes assumptions are almost impossible to identify*
- 4. Look for one of your assumptions among the answer choices.*
- 5. Check each answer choice against its effect on the conclusion:*
 - Ask question: Is this condition/fact necessary for the conclusion to be drawn or is it possible that the conclusion can live without it? Always remember the conclusion of the argument!*
- 6. Apply the negation technique when necessary.*
- 7. Remember most common assumption types (as presented on slides 5-8).*
- 8. Keep in mind some useful tips in tackling assumption questions (slide 14).*

Assumption Questions: Tips

- *Look for common argument types (cause-effect, statistical, analogy)*
- *Watch for shifts in language between the premises and conclusion.*
- *Keep in mind the possibility of the “general assumption” (it simply assumes that nothing changes in the process or that all other factors remain equal.)*
- *Watch for answers with the phrase «at least one» or «at least some». Such answers are usually correct.*
- *Avoid answers that claim an idea was the most important consideration for the author (The main factor, the primary purpose).*
- *Watch for the use of «not» or negatives in assumption answer choices .*

Assumption Question

2. Art historian: Great works of art have often elicited outrage when first presented: in Europe, Stravinsky's *Rite of Spring* prompted a riot, and Monet's *Dejeuner sur l'herbe* elicited outrage and derision. So, since it is clear that art is often shocking, we should not hesitate to use public funds to support works of art that many people find shocking.

Which of the following is an assumption that the art historian's argument requires in order for its conclusion to be properly drawn?

- (A) Most art is shocking.
- (B) Stravinsky's and Monet received public funding for their art.
- (C) Art used to be more shocking than it currently is.
- (D) Public funds should support art.
- (E) Anything that shocks is art.

Assumption Questions

2. (D) is correct answer.

Assumption Questions

3. In Western economies, more energy is used to operate buildings than to operate transportation. Much of the decline in energy consumption since the oil crisis of 1973 is due to more efficient use of energy in homes and offices. New building technologies which make lighting, heating, and ventilation systems more efficient, have cut billions of dollars from energy bills in the West. Since energy savings from those efficiencies save several billion dollars per year today, we can conclude that 50 to 100 years from now they will save more than \$200 billion per year (calculated in current dollars).

On which of the following assumptions does the argument rely?

- (A) Technology used to make buildings energy efficient will not become prohibitively expensive over the next century.
- (B) Another oil crisis will occur in the next 50 to 100 years.
- (C) Buildings will gradually become a less important consumer of energy than transportation
- (D) Energy bills in the West will be \$200 billion lower in the next 50 to 100 years.
- (E) Energy-efficient technologies based on new scientific principles will be introduced in the next 50 to 100 years.

Assumption Questions

3. (A) is correct answer.

Assumption Question

4. Doctors in Britain have long suspected that patients who wear tinted eyeglasses are abnormally prone to depression and hypochondria. Psychological tests given there to hospital patients admitted for physical complaints like heart pain and digestive distress confirmed such a relationship. Perhaps people whose relationship to the world is psychologically painful choose such glasses to reduce visual stimulation, which is perceived as irritating. At any rate, it can be concluded that when such glasses are worn, it is because the wearer has a tendency to be depressed or hypochondriacally.

The argument assumes which of the following?

- (A) Depression is not caused in some cases by an organic condition of the body.
- (B) Wearers do not think of the tinted glasses as a means of distracting themselves from other people.
- (C) Depression can have many causes, including actual conditions about which it is reasonable for anyone to be depressed.
- (D) For hypochondriacs wearing tinted glasses, the glasses serve as a visual signal to others that a the wearer's health is delicate.
- (E) The tinting does not dim light to the eye enough to depress the wearer's mood substantially.

Assumption Questions

4. (E) is correct answer.