

# 5

## LOGICAL REASONING

# flaws

There are many skills that are necessary for success on the Logical Reasoning sections, but there is one particular skill that is of far more importance than all others: the key to Logical Reasoning success is your ability to see what is wrong with arguments. If you are consistently able to do this, questions will become easier—stimuli that seemed impossibly convoluted before will become far simpler to understand and organize, incorrect answers will seem much more obviously so, and correct answers will be far more predictable across a broad spectrum of question types.

The majority of questions that appear in the Logical Reasoning section require you to be critical of the reasoning relationship between a conclusion reached and the reasoning given for that conclusion. If, in some of these situations, the reasoning did just happen to justify the conclusion, this would be a far different exam, and many of the strategies that appear in the following lessons would be completely different. However, this is not the case. Every single time a question requires that you evaluate reasoning critically, the support given will not justify the point made. In every single one of these situations, your ability to see as clearly as possible why the support doesn't justify the conclusion will be fundamental to the task the question presents.

Furthermore, it just so happens that developing your ability to evaluate critically will make you better at answering questions that have nothing to do with critically evaluating arguments—that minority of questions that require us to be non-judgemental. Reading for reasoning flaws helps you develop certain habits—such as organizing stimuli in terms of argument structure—that naturally align with many of those other questions.

So, as we said before, the key to Logical Reasoning success is your ability to see what is wrong with arguments. That's what we're going to work on now, and that's what we're going to get really, really good at first. Let's start with some basics.

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**The key to  
Logical Reasoning  
success is your  
ability to see  
what is wrong  
with arguments**

## Know Where to Look for the Flaw

Imagine you saw the following argument on the LSAT: “Ghosts can only be seen by those with kind hearts. Mother Teresa is revered as a person of great kindness. However, she never saw a ghost in her entire life. Therefore, she does not have a kind heart.”

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**Reasoning flaws exist between the support and the conclusion**

Terrible argument, I know. But why, exactly? If you heard it in real life, you could come up with a lot of reasons why it is flawed, I’m sure. However, it’s important for you to know that, in terms of the LSAT, not all flaws are important. The LSAT is only interested in a certain type of flaw—a flaw in the relationship between the conclusion reached and the support used.

Perhaps you disagree with the idea that Mother Teresa has no kindness, and perhaps you know of other examples from her life that justify a different conclusion. However, the flaw that you see in the conclusion has nothing to do with reasoning. It’s simply an opinion that you happen to disagree with.

Perhaps you disagree with the idea that ghosts can only be seen by those who have kind hearts. Maybe you don’t believe that ghosts are real. But there is no reasoning in this statement. The flaw you see is again simply based on your opinion of the premise.

The LSAT is not a test of opinions. When we encounter an argument on the LSAT, our job is not to evaluate the truth of the conclusion, nor is it to evaluate the truth of the support. Our job is to focus in on one specific arena—the use of that support to justify that conclusion. If we take the support to be true, is it enough, by itself, to absolutely prove the main point?

If we take it to be true that ghosts can only be seen by those with kind hearts, does this absolutely prove that Mother Teresa did not have kindness? No, it doesn’t. Why not? Because we only know that ghosts *can* only be seen by those with kindness—this does not tell us that everyone with kindness must have seen at least one ghost. Maybe Mother Teresa does have a kind heart, but she simply never had an opportunity to see a ghost. This is what is wrong with the reasoning of the argument.

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### opinions vs. flaws of reasoning

**“Harry Potter is the most popular book series of our time. Therefore, it’s the one book series from our era that will most likely be read by future generations.”**

You may *disagree* with the idea that Harry Potter is the most popular series of our time...  
You may *disagree* with the idea that it will be the series most likely read by future generations...

But the *reasoning flaw* has to do with the use of that support to justify the conclusion:

**Just because it’s popular now doesn’t mean that future generations will read it.**

# Mindset Is Critical

We are all experts at evaluating arguments—we hear people (and advertisements) make arguments all day, every day. And whether we are aware of it or not, when we evaluate these arguments, we always do so with a little bit of bias. The word “bias” has many negative connotations, but it’s a natural human instinct, and it’s a part of our intelligence. When Stephen King makes an argument about how to write a good horror story, you tend to believe it more than you might if your struggling writer neighbor who seems not so bright says exactly the same thing.

In terms of the LSAT, the aspect of our bias that is most important is our natural instinct to either try to go along with an argument, or to be critical of it. It is to your great advantage to think about Logical Reasoning questions from the latter of those perspectives. You don’t want to think about arguments in terms of “How could it be that this conclusion is valid?” and you don’t think about them in terms of “Does this support validate the conclusion?” In every instance it won’t. And in every instance your focus needs to be “Why doesn’t the support justify the point?” We’ll do a lot of work together in this book to ensure that by test day this is habit. Every time you are asked to be critical of an argument, you want to think to yourself:

- 1) What’s the point?
- 2) How’s it supported?
- 3) What’s wrong with that?

Our goal is ambitious: you are going to get to the point where, for nearly all questions that require subjectivity, you will be able to intuitively, without a lot of forceful or conscious action, come up with a clear understanding of exactly what is wrong with the argument. And mindset is going to be a huge part of it.

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**We always want to think about why the support doesn’t validate the conclusion**

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## mindset determines reaction

### *Receptive*

Imagine: You need a new doctor, and so you ask for a suggestion from a friend of yours, who is a nurse who works with lots of different doctors. She suggests Dr. Anderson, and gives reasons to support her choice. The reasons are quoted to the side.

Your reaction: You wouldn’t have asked your friend if you didn’t trust her advice, and those seem like very good qualifications—exactly the things you were looking for in a doctor. You decide to go with the suggestion.

### *Critical*

Imagine: Dr. Anderson just botched your routine procedure, and now your body is a mess. And, sure, he sat with you afterward to explain what he did wrong, and he seemed sorry about it, but in talking to him you realized he’s a total fool. You’re up late one night, and you hear this quote on the side in a commercial for Dr. Anderson.

Your reaction: A great doctor is one who helps keep you healthy. None of those characteristics mean that he is a great doctor.

**“Dr. Anderson went to a top medical school, and has years of experience. Plus, he genuinely cares about his patients, and will take the time to answer all of your questions. He is a great doctor.”**

## The LSAT rewards a critical mindset.

## A True Understanding Is a Conceptual One

I want you to get warm and fuzzy for just a minute. I want you to think about someone you really, really love. Imagine writing down how much you love that person and why.

Do you think you can accurately represent what you feel and why? To the point that the person reading what you wrote could understand exactly how you feel? No, not even if you are the greatest writer in the world. It simply has to do with the fact that words are far more limited and black and white than is our true understanding of things.

When we face tough questions and especially when we feel time pressure, many of us feel the temptation to tell ourselves that we know more than we do—in the case of arguments, that we know the flaw, when in fact we don't. This temptation is understandable—after all, we know deep down that knowing the flaw equals getting correct answers. When we want to fool ourselves, we often do so using words. We'll tell ourselves that a flaw fits a certain catch-phrase, such as “Oh, it's an ‘unless’ issue” or “That's a sufficient/necessary issue,” and think that being able to give a name to a flaw is the same as knowing it. But as we have talked about, knowing something and knowing some phrases to describe it are two different things.

So, don't let yourself off the hook with a catch-phrase for the issue. If you know an issue well, you should be able to describe it in different ways. Furthermore, it's very common for right answers to have the substance you expect, but in a form that is unexpected or difficult to understand. That is, they will represent the flaw that you saw, but from an unexpected angle, or by using unexpected (often unnecessarily complicated) language. A more flexible and conceptual understanding will help you adapt to these types of answers better.

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**If you really know what's wrong with an argument, you should be able to describe the flaw in a variety of ways**

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### different words / same flaw

*“The last two Sundays, I've worn my team's jersey to watch the game, and they have won. It's definitely because I've worn the jersey.”*

Fails to consider that the connection between the jersey and the wins could just be a coincidence.

Takes for granted that there is a direct relationship between what he chooses to wear and how the team performs.

Falsely assumes that a correlation between wearing the jersey and team victories is sufficient to validate a causal relationship between the two.

## Two Mantras for Finding Flaws

Two phrases epitomize the common faults in Logical Reasoning arguments: “The author fails to consider that...” and “The author takes for granted that...”

Nearly every single flaw that appears in an LSAT argument can be thought of in one or both of these ways; in fact, this is the way that the test writers think about flaws. You’ll see that a great many answer choices are written using these very words.

Put yourself in the mind of the person making the flawed argument. This person thinks that the reasons she gives are enough to validate the conclusion that she reaches. But they are not. You know for sure that they are not. What is she doing wrong?

We’ll talk more specifically about this in the following lessons, but, in general, she’s forgetting to think about something she needs to think about (fails to consider) or she’s assuming some sort of connection that doesn’t actually exist (takes for granted).

You want to get in the habit of having these two phrases run through your head as you read and think about arguments, for they can help you pay attention to, and see better, exactly what the problem is with the way an argument is presented and justified.

### Instructions for the drill starting on the following page:

On the following pages is a set of drills meant to help you get into a critical mindset. In each case, a scenario is presented and then various arguments are made. There are spaces underneath these arguments, and you are meant to write in what is wrong with the argument. You may prefer just to think about and not write in the flaw, especially when it is obvious, but do keep in mind that these exercises are in large part designed to help you develop habits, and writing down what you think is wrong is really good for you. The phrases “The author fails to consider...” and “The author takes for granted...” have been provided for you underneath the arguments. If you want to practice seeing argument flaws in terms of one phrase or the other, you can go ahead and circle the phrase you would start with, then write in the rest.

Keep in mind that you definitely don’t have to think about every flaw in one of these two ways (per the comments on the opposite page), and sometimes it’ll make sense for you to word the flaw differently. Check your versions against the solutions after each set. Note that the four sets will increase in difficulty.

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### Your Logical Reasoning mantras:

**“The author fails to consider that...”**

**&**

**“The author takes for granted that...”**

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## Flaw Drill

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### Scenario one: You are a parent, and the arguments are made by your precocious five-year-old daughter.

Since Billie got a cookie, I should get a cookie.  
*fails to consider / takes for granted*

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Candy is healthy because it contains vitamin C, which is good for us.  
*fails to consider / takes for granted*

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There is no evidence that the Loch Ness monster is not real. So it probably exists.  
*fails to consider / takes for granted*

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Of course *Tangled* is the best movie ever. All of my friends agree.  
*fails to consider / takes for granted*

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Last night, I saw a TV show about a Siamese cat that was taught to jump off a diving board. Since our cat Millie is a Siamese cat, I bet we can train her to jump off a diving board.  
*fails to consider / takes for granted*

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Did you know Ted is older than Grandma? He must be really old!  
*fails to consider / takes for granted*

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### Scenario two: You are a teenage girl, and the arguments are made by your very conservative parents.

You should go out with him! He's very smart.  
*fails to consider / takes for granted*

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Since it won't help with your homework, you shouldn't watch television.  
*fails to consider / takes for granted*

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You can't wear that shirt. It shows your belly button.  
*fails to consider / takes for granted*

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This shirt is less formal than my other shirts. So this is my hip shirt.  
*fails to consider / takes for granted*

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You can't get a tattoo. Your aunt Barbara got a tattoo, and she is in jail.  
*fails to consider / takes for granted*

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You can't stay out after ten. When I was a kid, no one stayed out after ten.  
*fails to consider / takes for granted*

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## Flaw Drill

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### Scenario three: You hear the following arguments on the news...

Recent reports that the mayor received illegal campaign contributions seem to be false. It's just been uncovered that a disgruntled former employee has been leaking the stories to the press because of a personal issue with the mayor.

*fails to consider / takes for granted*

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Ironically, in our current general economic state, individuals need to spend more money in order for our general economy to improve. So, go out and spend, spend, spend! It's good for our country.

*fails to consider / takes for granted*

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For the last twenty years, we have consistently enacted systems that have lowered the percentage of income the government collects as tax while also increasing government spending. If we continue to act as we have for the past twenty years, we will continue to increase the amount of debt our nation incurs.

*fails to consider / takes for granted*

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We live under the assumption that the United States is the wealthiest of all nations, but this is not true. Qatar, an Arab country located in Western Asia, has a higher per capita income.

*fails to consider / takes for granted*

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LeBron James is now the most recognized athlete in the world. A recent poll by *Sports Illustrated* showed that he is by far the most recognized athlete amongst its readers.

*fails to consider / takes for granted*

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As everyone knows, consuming a moderate amount of wine can be part of a healthy diet. Wine contains antioxidants, which have been proved to support good health.

*fails to consider / takes for granted*

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### Scenario four: Can you disprove the absolute validity of arguments you may agree with in real life?

Objective journalism is a required component of a well-working democracy. However, we live in an age in which the vast majority of our news is delivered with a great deal of bias and affiliation toward one political ideology or another. If we are to have a well-working democracy, government and media corporations must act to restore more objectivity to news media.

*fails to consider / takes for granted*

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Turns out that chimps are not the smartest of all non-human mammals after all. Recently, it was shown that whales are able to compose and communicate with songs that rival and often surpass songs that humans are capable of composing in terms of complexity and aesthetic elegance.

*fails to consider / takes for granted*

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Underlying much of the violence that exists in the world today are differences of opinion about the true nature of God and religion. It is extremely unlikely that we will get proof, in our lifetime, that one religion is definitely correct, or one religion is definitely incorrect, and without such proof, these differences will invariably exist. Therefore, it is to the general benefit of humanity to promote tolerance towards different religious views.

*fails to consider / takes for granted*

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For certain careers, the graduate school that you choose to attend has little impact on future career success. Not so for the legal profession. Lawyers who attend top law programs consistently earn the highest salaries, and all members of the Supreme Court went to either Harvard or Yale.

*fails to consider / takes for granted*

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Creationism is an idea whose leading proponents are politicians and religious figures. Not a single reputable, well-respected scientist has come out in support of Creationism as a valid scientific theory. Therefore, Creationism is not a legitimate scientific theory.

*fails to consider / takes for granted*

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Good intentions line the histories of many of our most environmentally harmful products. For example, plastic was invented, at least in part, to combat the wasting of wood and paper products. This proves that good intentions, coupled with limited foresight, can cause negative consequences for our environment.

*fails to consider / takes for granted*

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## Flaw Drill Solutions

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### Scenario one: You are a parent, and the arguments are made by your precocious five-year-old daughter.

Since Billie got a cookie, I should get a cookie.

Takes for granted that she should get a cookie just because Billie did. It could be that Billie did something special to get the cookie, or it could be that the five-year-old can't eat the cookies in question for health reasons.

Candy is healthy because it contains vitamin C, which is good for us.

Fails to consider that the other components of candy may make it so that candy is, overall, not good for us. It could be that something else in candy, like sugar, makes it not so healthy.

There is no evidence that the Loch Ness monster is not real. So it probably exists.

Takes for granted that since it has not been disproved, it must be real. It could be true that there is also no proof it does exist.

Of course *Tangled* is the best movie ever. All of my friends agree.

Takes for granted that her friends' tastes present an accurate representation of the quality of movies. Perhaps *Tangled* is a movie that appeals a certain way to a certain age group, but is not, overall, the best movie ever.

Last night, I saw a TV show about a Siamese cat that was taught to jump off a diving board. Since our cat Millie is a Siamese cat, I bet we can train her to jump off a diving board.

Fails to consider that other characteristics could differentiate Millie from the cat on the TV. Perhaps the cat on the TV has a world-class trainer and has been working at the skill since birth.

Did you know Ted is older than Grandma? He must be really old!

Takes for granted that being older than Grandma guarantees that one is old. Perhaps Grandma is in her thirties.

### Scenario two: You are a teenage girl, and the arguments are made by your very conservative parents.

You should go out with him! He's very smart.

Fails to consider that being smart may not be the characteristic that defines who you should date. Perhaps he's also a jerk. Or maybe you prefer dating dumb people, and you should date who you want to date.

Since it won't help with your homework, you shouldn't watch television.

Takes for granted that one shouldn't do something unless it helps with homework. Perhaps there are other reasons to watch television.

You can't wear that shirt. It shows your belly button.

Takes for granted that you can't wear shirts that show your belly button. Maybe you are wearing the shirt *because* it shows your belly button.

This shirt is less formal than my other shirts. So this is my hip shirt.

Takes for granted that being less formal than other shirts makes one shirt hip. Perhaps none of the shirts are hip, or perhaps it's hip to be formal.

You can't get a tattoo. Your aunt Barbara got a tattoo, and she is in jail.

Takes for granted that getting a tattoo had an impact on Barbara going to jail, and takes for granted that Barbara's case is relevant to yours. Perhaps your aunt Barbara is a violent loon.

You can't stay out after ten. When I was a kid, no one stayed out after ten.

Takes for granted that what applied to the parent when he or she was a kid applies to the teenager now. It could be that what was the norm then isn't the norm now. Also, just because others don't do it doesn't mean you can't.

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## Flaw Drill Solutions

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### Scenario three: You hear the following arguments on the news...

Recent reports that the mayor received illegal campaign contributions seem to be false. It's just been uncovered that a disgruntled former employee has been leaking the stories to the press because of a personal issue with the mayor.

Fails to consider that even if a disgruntled employee leaked the stories, the mayor could have received illegal contributions. Whether the employee was disgruntled or not doesn't affect whether the stories are true.

We live under the assumption that the United States is the wealthiest of all nations, but this is not true. Qatar, an Arab country located in Western Asia, has a higher per-capita income.

Takes for granted that per-capita income is enough to make a determination about the wealth of a nation. Perhaps other factors, such as gross domestic revenue, are more important when considering the wealth of a nation as a whole.

Ironically, in our current general economic state, individuals need to spend more money in order for our general economy to improve. So, go out and spend, spend, spend! It's good for our country.

Takes for granted that what is good for our general economy is what is good for our country. Perhaps there are other, more significant considerations that determine what is good for our country.

LeBron James is now the most recognized athlete in the world. A recent poll by *Sports Illustrated* showed that he is by far the most recognized athlete amongst its readers.

Takes for granted that a poll of *Sports Illustrated* readers is representative of the entire world population. Perhaps people who don't read *Sports Illustrated* happen to recognize another athlete more.

For the last twenty years, we have consistently enacted systems that have lowered the percentage of income that government collects as tax while also increasing government spending. If we continue to act as we have for the past twenty years, we will continue to increase the amount of debt our nation incurs.

Takes for granted that a lower percentage tax and increased spending must equate to an increase in debt. Perhaps the economy will grow at a rate that offsets, or more than offsets, such changes.

As everyone knows, consuming a moderate amount of wine can be part of a healthy diet. Wine contains antioxidants, which have been proved to support good health.

Fails to consider that there are other aspects that could make drinking a moderate amount of wine unhealthy overall. Perhaps wine has an ingredient that does far more harm than antioxidants do good.

### Scenario four: Can you disprove the absolute validity of arguments you may agree with in real life?

Objective journalism is a required component of a well-working democracy. However, we live in an age in which the vast majority of our news is delivered with a great deal of bias and affiliation toward one political ideology or another. If we are to have a well-working democracy, government and media corporations must act to restore more objectivity to news media.

Takes for granted that government and media corporations must do the work of restoring more objectivity to news media. Perhaps some other entity, such as a blogger, could do the work.

For certain careers, the graduate school that you choose to attend has little impact on future career success. Not so for the legal profession. Lawyers who attend top law programs consistently earn the highest salaries, and all members of the Supreme Court went to either Harvard or Yale.

Takes for granted that the school has a direct impact on future career success. It could be that they are simply correlated; perhaps some other factor, such as personal drive, causes certain people to get accepted into certain schools and to have success in their careers.

Turns out that chimps are not the smartest of all non-human mammals after all. Recently, it was shown that whales are able to compose and communicate with songs that rival and often surpass songs that humans are capable of composing in terms of complexity and aesthetic elegance.

Takes for granted that the ability to compose and communicate with songs is accurately representative of overall intelligence. Perhaps there are other reasons why chimps are smarter than whales.

Creationism is an idea whose leading proponents are politicians and religious figures. Not a single reputable, well-respected scientist has come out in support of Creationism as a valid scientific theory. Therefore, Creationism is not a legitimate scientific theory.

Takes for granted that the opinion of the scientific community is accurately representative of what is a legitimate scientific theory. Darwin and Galileo were both initially dismissed by the scientific community at large.

Underlying much of the violence that exists in the world today are differences of opinion about the true nature of God and religion. It is extremely unlikely that we will get proof, in our lifetime, that one religion is definitely correct, or one religion is definitely incorrect, and without such proof, these differences will invariably exist. Therefore, it is to the general benefit of humanity to promote tolerance towards different religious views.

Takes for granted that tolerance will lead to a decrease in violence, and that a decrease in violence is for the general benefit of mankind. Perhaps general tolerance inflames certain violent tendencies, or perhaps for some crazy reason, violence is part of a "healthy" humanity.

Good intentions line the histories of many of our most environmentally harmful products. For example, plastic was invented, at least in part, to combat the wasting of wood and paper products. This proves that good intentions, coupled with limited foresight, can cause negative consequences for our environment.

Takes for granted that good intentions had a hand in causing these negative consequences. It could be that, even though these items were made with good intentions, what caused them to be harmful was just poor foresight or some other factor.

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**In large part, real LSAT arguments will feel harder because the test writers make it difficult for us to recognize the argument and see it clearly**

1. Consider these two different ways of writing the same main point:

There has been no credible evidence produced by anyone in the world that vampires actually exist. *Therefore, vampires do not exist.*

*Shelley thinks vampires exist.* However, there has been no credible evidence produced by anyone in the world that actually shows that. *Therefore, she is wrong.*

Note that it's the same point, but the second form just makes it a bit harder for us to identify the point, and a bit harder to retain it in our minds throughout the rest of the problem-solving process.

## How Did You Do?

Maybe you found all four sets to be very simple. Maybe you are sitting there wondering why the answers you came up with are totally different from the ones in the solutions. In either case, the most important thing is that you begin to develop certain habits when it comes to thinking about arguments. Namely, that you evaluate them in terms of how the supporting premises are being used to justify the conclusion, and that you do so with a mindset of trying to figure out exactly why the support does not justify the conclusion reached.

## How Does This Work Translate to the LSAT?

LSAT arguments will have flaws that are as clear and significant as the flaws in the simple arguments we discussed in this lesson. However, the hardest LSAT arguments are significantly harder to evaluate than were most of the arguments we practiced here. In large part, LSAT arguments are much harder because the test writers make it a challenge for you to see and understand the argument clearly. They do this in a few different ways:

(1) They will hide the argument within a lot of clutter. Notice that one of the reasons that scenario four was a bit more difficult than one and two was that you simply had more information to process. The LSAT writers will commonly form this clutter by giving us bountiful background information or information that may be used against the argument. This information can be important for understanding context but will not be directly relevant to the reasoning issues in the argument.

(2) They will separate out the conclusion and the support from one another. In addition, also expect that the support will sometimes come split in separate pieces, and that the conclusion will sometimes come split in separate pieces.<sup>1</sup>

(3) They will speak with a tone of authority on subjects about which you are unfamiliar. When we see material written in an “expert” tone, and when we are not ourselves experts in the field, we are often more susceptible to simply accepting the reasoning that we are given.

There is plenty of time to become great at cutting through the extraneous challenges the test writers present, and when you are able to do so, you will see that a majority of questions hinge on your obtaining a simple understanding of why the support given doesn't validate the conclusion reached. Habit and mindset are key. Let's take a look at two full questions that illustrate how the process might play out during the course of the exam. I suggest you try solving the questions on your own before looking at their respective solutions.

# the process in action

*On this page and the next are two examples that illustrate how the ability to recognize the flaw fits into the greater problem-solving process.*

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## ONE: UNDERSTAND THE JOB

I recommend that you begin every problem by reading the question stem. The question stem will give you a clear sense of what you need to accomplish as you read the stimulus. Here, we need to select an answer that most strongly indicates a problem with the evidence used to justify the point. This answer will invariably exploit the flaw in the relationship between the conclusion and its support, and correctly recognizing that flaw will be the key to our success.

## TWO: UNDERSTAND THE ARGUMENT

We need to isolate the main point and its support from the rest of the stimulus, and we need to make sure that we completely and correctly understand the point made, the support being used, and the manner in which the support is meant to justify the point.

The point in question is the naturalists' claim: polar bears can navigate over considerable distances. We are given a very specific definition of navigation in the background information: an animal's ability to find its way from unfamiliar areas to areas it knows, with the areas being outside the animal's sensory range. The evidence used is that of a polar bear that found its way home from 300 miles away.

Argument: A polar bear got home from 300 miles away, so it must be true that polar bears can navigate over considerable distances.

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## THREE: FIND WHAT'S WRONG

To us, 300 miles seems a long distance to walk, but keep in mind that we've been given a very specific definition of navigation, we have a conclusion about navigation, and **we don't actually know that, for a polar bear, this journey requires navigation.** We don't know that this trip was in territory that was unfamiliar for the bear, and we don't know if 300 miles is beyond a bear's sensory range.

With a clear sense of what is wrong with the conclusion-support relationship, we can head into the answer choices.

## FOUR: FINISH THE JOB

Our job is to look for an answer that makes us doubt the use of this evidence to justify this point. The right answer should relate to the fact that the evidence doesn't prove that the bear was in unfamiliar territory or beyond sensory range.

For all Logical Reasoning questions, we want to first work to eliminate answers we know to be incorrect, then confirm the answer we think is best. (A) may be a sign that the navigation skills are not perfect, but it does not play an absolute role in relation to the conclusion-support relationship (perhaps stopping and changing course is part of the bear's strategy). In any case, since it doesn't weaken the idea that the polar bears can navigate, we can eliminate (A). (B) represents a clear problem with the support-conclusion relationship—if the bear was familiar with the route, it did not have to use navigation skills. Let's leave (B). It's unclear how snow and ice relate to the reasoning in the argument, so we can eliminate (C) easily. The fact that polar bears are one of many animals that travel long distances to find home neither helps nor hurts the argument, so we can eliminate (D). (E) relates to an issue we saw in the argument—we weren't sure it hadn't used its senses over the 300 miles—but it does not directly impact the support-conclusion relationship, for it doesn't give us any actual information about whether the polar bear in the example used its senses to find its way home. That leaves only (B), and (B) is the correct answer.

# the process in action

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PURPOSES

## ONE: UNDERSTAND THE JOB

Our job is to find the reasoning flaw in the original argument, then to find an answer that has a similar reasoning issue. For matching flaw questions, it's imperative that we develop a very strong, clear sense of what is wrong with the original argument, because we will have to be able to retain it in our heads as we evaluate the five new arguments that are presented in the answer choices.

## TWO: UNDERSTAND THE ARGUMENT

The author's point comes right at the end, and it's a strong one: "it is obvious that these industrial activities are purely beneficial to agriculture and those of us who depend upon it." What's the support given? These industrial activities increase carbon dioxide, which aids in photosynthesis, which helps plants live.

## THREE: FIND WHAT'S WRONG

The support is a bit complicated in that it involves several specific factors and layers (industrial activities related to carbon dioxide related to photosynthesis related to life-sustaining proteins), but the specifics of those links are not necessary for us to see what is wrong with the reasoning here: we're only given one potentially positive benefit of these industrial activities. The author is overreaching in stating such an absolute and general conclusion. **The author fails to consider that there may be other negative consequences that prevent these activities from being "purely beneficial."**

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## FOUR: FINISH THE JOB

With a clear sense of the flaw in our argument, we can go into the answer choices. As with the previous question, we want to start by focusing on reasons why wrong answers are wrong. The four wrong answers will all have problems, and there will be markers that make this clear—they may reach different types of conclusions (you can't have the same type of flaw if you end up at a different type of conclusion), or use support in a different way. So, when we notice these characteristics, we can use them to knock off answers.

Notice that the argument in (A) reaches a comparative conclusion—one thing will be better than another. This is a different type of conclusion than what was reached in our argument, and so we know that that argument must have had a different sort of reasoning issue. We can eliminate (A) for that reason. The absolute nature of the conclusion in (B)—"clearly no harm, and

a lot of good"—is a great match for our original argument, and in looking at the support, it seems that (B) has very similar reasoning issues. Let's leave it. (C) is very different from our original argument—it mentions something in its conclusion (fasting) that is very different than what is discussed in its premises. We can eliminate (C) quickly. (D) reaches a conclusion about choosing one thing over another, and can be eliminated for that reason. (E) is about the best policy—what we *ought* to do, which is a very different type of conclusion than we had in the original argument.

Once we've eliminated wrong choices, there is only one attractive answer remaining: (B). (B) reaches the same type of absolute conclusion, and, like our original argument, fails to consider other, potentially negative considerations (such as that exercise can cause injury) in arriving at that conclusion. (B) is a great match, and (B) is correct.

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## Matching Double-Dip Drill

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Here are some of the arguments that you saw in the earlier drill. Draw lines connecting the pairs of arguments that have the most similar reasoning flaws.

Turns out that chimps are not the smartest of all non-human mammals after all. Recently, it was shown that whales are able to compose and communicate with songs that rival and often surpass songs that humans are capable of composing in terms of complexity and aesthetic elegance.

Did you know Ted is older than Grandma? He must be really old!

Objective journalism is a required component of a well-working democracy. However, we live in an age in which the vast majority of our news is delivered with a great deal of bias and affiliation toward one political ideology or another. If we are to have a well-working democracy, government and media corporations must act to restore more objectivity to news media.

For certain careers, the graduate school that you choose to attend has little impact on future career success. Not so for the legal profession. Lawyers who attend top law programs consistently earn the highest salaries, and all members of the Supreme Court went to either Harvard or Yale.

LeBron James is now the most recognized athlete in the world. A recent poll by *Sports Illustrated* showed that he is by far the most recognized athlete amongst its readers.

Creationism is an idea whose leading proponents are politicians and religious figures. Not a single reputable, well-respected scientist has come out in support of Creationism as a valid scientific theory. Therefore, Creationism is not a legitimate scientific theory.

As everyone knows, consuming a moderate amount of wine can be part of a healthy diet. Wine contains antioxidants, which have been proved to support good health.

Good intentions line the histories of many of our most environmentally harmful products. For example, plastic was invented, at least in part, to combat the wasting of wood and paper products. This proves that good intentions, coupled with limited foresight, can cause negative consequences for our environment.

This shirt is less formal than my other shirts. So this is my hip shirt.

For the last twenty years, we have consistently enacted systems that have lowered the percentage of income the government collects as tax while also increasing government spending. If we continue to act as we have for the past twenty years, we will continue to increase the amount of debt our nation incurs.

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## Matching Double-Dip Solutions

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**In both of these arguments, a specific characteristic (musical ability/antioxidants) is used to validate a more general statement (intelligence/healthiness). In both instances, the author fails to consider that other factors could be relevant.**

**In both of these arguments, a correlation (two things happening at the same time, to the same person, etc.) is used to justify a statement about causation. Correlation never justifies causation. It could be that, though schools and success are linked, the schools are not part of what causes success, and the same goes for the good intentions.**

**In both of these arguments, a comparative statement is used to justify an absolute statement. The second argument has an additional flaw of assuming that formal and hip are in some way opposites.**

**In both of these arguments, the author is failing to consider some other critical factor that may be relevant to the conclusion. The author of the first argument fails to consider that entities other than government and media corporations have the power to impact society, and the author of the second fails to consider that other factors, such as the amount of income Americans make, play a role in government debt.**

**In both of these arguments, the author takes the opinions of a group to be representative of the truth.**

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