LSAT Logical Reasoning: From the Basics to the Hardest Questions Ever

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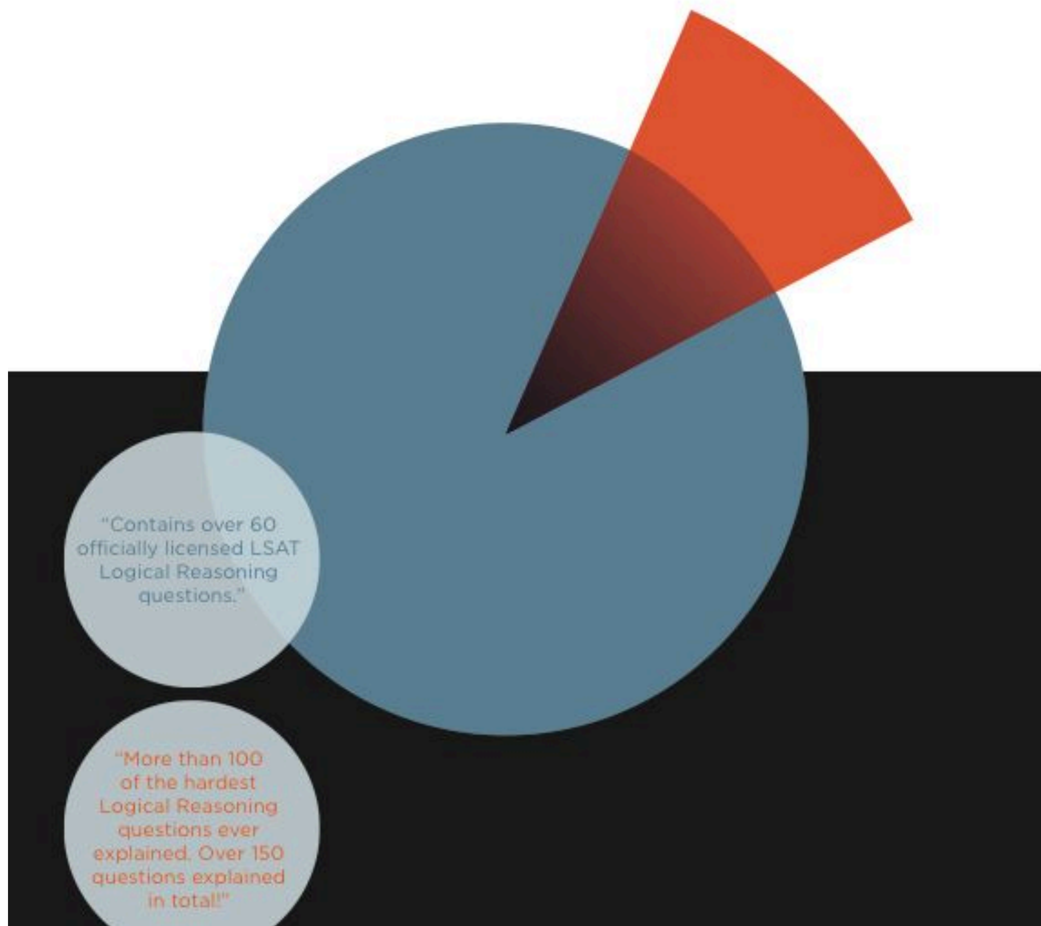

Greetings ambitious and brave one!

You are taking the LSAT and you want to go to law school, so you are ambitious. You have chosen a guide that will take you from the basics of logic through the hardest Logical Reasoning questions ever, so you are brave.

The two sentences above each contain a fact and a conclusion – as you shall soon learn, they each contain an *argument*. Most Logical Reasoning questions follow a short passage that is an argument; this is why some LSAT preparation guides refer to the Logical Reasoning section as the "Arguments" section. Some of those short passages, however, are not arguments but consist only of facts; for this reason, it is best to refer to the section as Logical Reasoning. The Law School Admission Council (LSAC), the LSAT authors, refers to section as Logical Reasoning – when it makes sense, you should go with the people that write the test!

If you have experience analyzing arguments, you might have noticed that *every* sentence above contain some crucial *assumptions*. In the first paragraph I assumed that the person reading this – "*you*" – was actually planning on taking the LSAT and not a friend or family member of such a person (or someone who really needs some different hobbies). In those two sentences I also assumed that certain character traits – such as "ambition" and "bravery" – could be deduced from just one known fact. In the last sentence of the second paragraph, I assumed that the authors of the LSAT are, all things being equal, a more reliable authority than certain other test preparation companies. I also assumed that the more reliable authority – in this case the LSAC – provides a better guide to take action: "*you **should** go* with the people that write the test."

If some, most, or all of these assumptions escaped you, don't panic! It takes a great deal of practice to recognize the assumptions in an argument. It takes even more practice to recognize that assumptions that are relevant to LSAT questions. This practice is, *I assume*, why you are here!

Before we jump into Logical Reasoning, there are some questions that I think are on every LSAT student's mind:

How do I get started?

Your first action should be to take the June 2007 LSAT, available for free from LSAC. Give yourself 35 minutes for each section. Do 2 sections, take a 15 minute break, then the 2 remaining sections. Do not worry about the writing sample or the fifth "*experimental*" section for now.

Taking the test will expose you to how challenging the LSAT can be. Your results on the test are not specifically predictive: one cannot conclude that one will improve ***X*** number of points from one's first test. But your results on the test will us with some data about your current natural ability and reasoning skills.

Natural ability? Reasoning Skills?

Good questions! What we will be working on are your reasoning skills. For better or for worse, your natural ability will probably not change much; in fact, it will not change much for the rest of your life. This is an awkward issue to face, but I think it is best to get the awkwardness out of the way. Almost all research done up until the present strongly supports the claim that natural ability – IQ – does not change much in an individual's adult life. This flies in face of one of our culture's most popular beliefs: with enough hard work, anyone can achieve anything.

If you want to succeed on the LSAT, learn this now: when the data undermines a widely held belief, embrace the data and doubt the belief! Simplistic slogans such as "statistics can prove anything" prove nothing.

Nearly everyone will improve when they study for LSAT, but few can actually score a 170 or above. Any test-preparation company, or anyone else, who says differently is misleading you. Think about it: how can ***everyone*** score a 170 or above when 170 or above means that one is in the ***top 3 percent***?

These statements might seem harsh - especially for an introduction! – but there is a purpose here: ***I want to work with the best*** – the students that have the best chance of scoring a 170 or above. And the best do not flinch in the face of uncomfortable truths.

But doesn't your website claim that in 2013, 50 percent of your students scored a 170 or above? Does that fact not contradict what you just wrote?

Another great question! I'm looking forward to working with you!

There is no question that I was lucky to work with some very gifted students in 2013 and throughout my career as an LSAT instructor. But they were not simply gifted; they had the *grit* to work tirelessly on improving their reasoning skills and earn the scores they did. By doing so, they were able to improve up to 30 points above their score on their first LSAT!

I am willing to work very hard; I have the "grit", but how do I determine how "gifted" I am?

To be honest, I don't exactly know! To be reasonable is to admit when one does not have sufficient evidence to draw a proper conclusion. SAT scores and your undergraduate GPA can be some indication of your natural ability, but those of course also reflect how well you prepared for the SAT and the difficultly of reasoning required by your undergraduate courses. And, as you will soon find out if you do not already know, the preparation and reasoning skills required by the LSAT far exceed those required by the SAT and undergraduate courses. Many students who scored a combined 1500 on the Math and Verbal sections of the SAT have trouble breaking 160 on the LSAT.

The only reliable way I know of to determine the one's true LSAT potential is to give it all you've got! Your first diagnostic score – from the June 2007 exam – is a challenge, not a chain. You are not bound to only improve a certain number of points! Alternatively, a good score is no guarantee of future success. Look on every demoralizing moment in LSAT preparation as a call to take further action; look on every victory as a cause for ***cautious*** optimism.

So what do I do to improve my reasoning skills as much as possible – to give it all I've got?

I divide LSAT preparation into three phases: Learning, Training, and the Final Approach.

Learning: 1 to 2 months

You learn the basics of the LSAT: the different kinds of Logical Reasoning Questions, Reading Comprehension Passages, and Logic Game setups. You practice these questions on the oldest available LSATs: Preptests 1 – 18. If you want to move at an accelerated pace, you can limit your practice questions to Preptests 7, 9-16, and 18 – the tests available in *10 Actual, Official LSAT Preptests*. These tests are hereafter called the "*Green Blues*," because the book they are in has a green and light blue cover. Preptests 1-6, 8, and 17 must be purchased separately from CAMBRIDGE LSAT or LSAT Blog. Those tests are hereafter called the *Ancient Ones*, because they are very old and must be purchased one at a time. A good compromise tactic – and one that can save you some money – is to purchase the *Ancient Ones* only if you need more practice before entering the training phase.

After the first 6 chapters of this book, you take your "*midterms*": Preptests 24, 29, 30, and 33. Preptest 24 is available in the book *10 More Actual, Official LSAT Preptests,* which contains Preptests 19 – 28. These tests are hereafter referred to as the "*Yellow Blues,*" because the book they are in has a yellow and blue cover. The other three tests of your *midterms* are available in the book *The Next 10 Actual, Official LSAT Preptests*, which contains Preptests 29 – 38. These tests are hereafter referred to by their test numbers, because the cover of this book is orange and purple, and it just seems silly to use the term "*Orange Purples.*"

If your average score of these 4 tests is within 10 points of your desired LSAT score, you are ready to move on to the *second part of the learning phase*. If your average score is 15 points or more below than your desired LSAT score, you must return to the *Ancient Ones* and do the assigned practice problems from those tests. If your average score is between 10 and 15 points, you can make a judgment call about how to proceed. Once you complete those practice problems from the *Ancient Ones*, or simply decide to proceed, you are ready to move on to the *second part of the learning phase*.

The second part of the learning phase is Chapters 7 through 9 of this book. These chapters take you through the remaining Logical Reasoning question types: these chapters draw their examples from your midterms Preptests 24, 29, 30, and 33. These chapters also introduce you to some more advanced reasoning concepts.

Do the practice problems from the *Green Blues* for these chapters. Once again, if you are within 10 points of your desired LSAT score, proceed to the training phase. If not, it is best to the remaining practice problems from the *Ancient Ones*.

Training: 1 week to 8 months

Take tests from the *Yellow Blues*, Preptests 29 – 38, and, if necessary, Preptests 39 – 45. Preptests 39 – 45 are also only available for individual purchase, so they are hereafter called the *Younger Ones* – they were written and administered much more recently than the *Ancient Ones*. Keep doing preptests until you have scored a score with which you are satisfied on at least 3 LSATs. If have exhausted nearly all of these tests and are you still not satisfied, you might need to adjust your expectations. If you score your 3 satisfactory scores very soon into the *Training* phase, and you want to proceed quickly, a later chapter of this book will detail which important Logical Reasoning questions that should be covered individually.

The time students spend training varies considerably: it can be the most frustrating part of LSAT preparation! It is, however, supremely important to have a firm foundation before the *Final Approach*! Also, it is best to be able to adjust your goals during the Training phase. The emotional highs and lows of LSAT preparation are best worked out before you start to take the most recent tests and best worked out well-before you actually take the test.

You also ***must not take Preptests 46 – 51*** – the last 6 of the *Younger Ones*! Even if you have prepared fully, unexpected events or crises, or just test-day anxiety, can cause a performance well below your best. Save these 6 preptests so you have the opportunity, if you need to retake, to test yourself on relatively recent tests.

The tactics I advise are cautious, perhaps overly so. You of course are free to do as you will. I have, however, in the over 10 years I have been teaching the LSAT, seen very few students err on the side of too much caution. The vast majority of students, emboldened by past success on standardized tests or a small number of good practice LSAT scores, take the test before they are ready and must retake.

Once you earn scores that make you happy on at least 3, and preferably more, LSATs, you are ready to move on to the Final Approach.

Final Approach: 6 to 10 weeks

The final approach consists of taking ***all*** the most recent Preptests 52 – 71, available in the two most recent published collections of LSATs. These must be taken as full tests, under test-like conditions. You also must add a fifth section to mimic the experimental section your real LSAT will contain. There is more on the experimental sections, and which sections you should choose to mimic an experimental section, in the introduction to the *Final Approach.*

This book draws questions from Preptests 52 – 71 at a rate of 3-5 questions per test. This is far more questions per LSAT than are chosen from earlier preptests. Are Logical Reasoning questions from these recent preptests harder than questions from earlier preptests?

In general, yes!

So if the recent questions are so much harder, why waste our time with the earlier, easy questions!

Okay, I know you are eager to get started, but there is no need to get snippy!

Recent LSATs are, on average, significantly more difficult than earlier LSATs: why this is the case is discussed more fully in the introduction to the *Final Approach*. Most students experience a drop of 2 – 5 points when they leave the *Training* phase and enter the *Final Approach*. Those points can be made up, and you can increase even further, during the 20 preptests of the Final Approach, but this is why it is so important to achieve strong scores in the *Training* phase.

The earlier questions are, on average, somewhat easier, but they are still relevant to achieving high scores on the contemporary LSAT. To think otherwise is to assume that these earlier questions are ***qualitatively*** different than the most recent questions. This is not the case! The earlier questions still adhere to principles of reasoning that have remained unchanged since at least the late 18th century Enlightenment. Some of these principles are as old as Plato and Aristotle, and some even older!

The older questions are ***quantitatively*** different. The difference between older and more recent questions is a difference of degree, not a difference of fundamentals. A contemporary student who can score between 170 and 173 on Preptest 1 can usually score between 167 and 170 on Preptest 71.

What does this mean? Has the LSAC deliberately made the test more difficult?

Sort of, but to say so depends on a very specific definition of "*deliberately*." This issue is also covered in the introduction to the *Final Approach*.

I included so many recent questions for four reasons:

1) The recent questions are the most relevant to the LSAT you will be taking
2) The recent questions reveal how the LSAT has evolved to become more and more difficult
3) The recent questions reveal new variations on familiar LSAT themes and patterns of reasoning
4) My current students studying for the next LSAT are most interested in these questions. I am completing this book in May of 2014, so the June exam is very soon!

The fourth reason relates to the following question:

You argued above that the Training phase is so important, so why do you cover very few questions from those tests? And, now that I think of it, what are we supposed to do about the freaking Logic Games and Reading Comprehension?!?

Later editions of this book will have more questions from the *Training* phase. I wanted to get this book completed for my students studying for the June 2014 LSAT, many of whom were already in the *Final Approach*!

I am working as you read this on Logic Games and Reading Comprehension tutorials that will accompany that book you now have. I focused on Logical Reasoning, however, not simply because there are two sections of it, compared to the one section of *Logic Games* and one section of *Reading Comprehension*. I have focused on *Logical Reasoning*, and its hardest questions, because ***success at the hardest Logical Reasoning questions is the most common barrier*** *between the best students and a* ***170 plus*** *score.*

With a great deal of practice, repetition, and sheer willpower – true grit, as they say – the most talented students will achieve mastery or near mastery on the *Logic Games*. *Reading Comprehension* is important to study – many students fail to take this section seriously and suffer as a result! But once students understand how to *read the passages as extended arguments* and *treat the questions like supported inferences* – these concepts will be explained in my upcoming *Reading Comprehension* tutorial! – students begin to see that the *reasoning* required by the section is relatively easy. *Reading Comprehension* usually comes down to staying focused and maintaining a reasonable pace. This is not as easy as it may sound. Very few students – myself included – can complete the *Reading Comprehension* section without missing 2 – 6 questions.

With near mastery on the *Logic Games*, however, you can balance these missed questions on *Reading Comprehension*. Then it all comes down to *Logical Reasoning*. And does it ever come down! The best students are usually struggling mightily to get that 5 – 6 wrong per section down to 3 – 4! And that struggle can take weeks or even months! With very few exceptions, the road to a ***170 plus*** score begins, and ends, with *Logical Reasoning*.

When I first conceived of this book, it was intended to cover only the hardest questions ever, with a strong emphasis on more recent questions. As I started to write the book, it became apparent that I would need to cover the basics as well to adequately prepare students for the difficult path ahead. You are brave and ambitious for choosing to work with these materials; very early in Chapter One we are already covering some of the hardest questions ever!

Okay, everything you've said makes sense and I am ready to begin. How do I use this book?

Thanks, you're so understanding!

Read these first chapters and do these early questions very slowly. Whenever you come to a page with a ***Question*** listed, find and do that question. Even if you get the question correct, read the explanation of the correct answer choice and every incorrect answer choices carefully. The goal in these first chapters is to ***learn*** about the questions and the reasoning underlying them, not simply to answer the questions correctly.

Later editions of the book will have content assessments – short quizzes on the material presented. But the most important assessments are the actual LSAT questions! You do not do yourself any favors by rushing through this early material. Neither I nor anyone else will grade you or penalize you for not reading thoroughly these chapters or for skimming them as you would some textbooks – the LSAT itself will be your judge!

Now let's get to work!

An Introduction to Argument Analysis

Question Category: Argument Structure

There are four question types in this category: ***Main Point, Role of Statement, Logical Completion****,* and ***Method of Reasoning****.*

Main Point Questions

An ***argument*** is defined as a ***main conclusion***, or ***main point***, supported by ***evidence***. The evidence consists of ***premises***, ***intermediate conclusions***, and ***contextual claims***:

Premise: a claim stated as a fact and ***unsupported*** by any independent evidence. A premise usually supports a ***main conclusion*** directly, but a premise can indirectly support the ***main conclusion*** via an ***intermediate conclusion***.

Intermediate Conclusion: a claim supported by a premise that itself supports the ***main conclusion***.

Contextual Claims: the remainder of the argument. Contextual claims can usually be eliminated without affecting the fundamentals of the argument. *Background information*, *rhetorical claims*, and *summaries of opposing viewpoints* fall into this category. Most important are the ***summaries of opposing viewpoints***, which can be subdivided into ***Counterevidence*** and ***Counterclaims*** and are described in more detail below.

The evidence supports a ***main conclusion*****,** or ***main point*****.** The main point is the *purpose* of the argument. The main point is the *logical endpoint* of the argument; although the main point is usually located at the end of an argument, it need not be. In fact, in most ***Main Point Questions***, the *main point will be located in the beginning or middle of the argument*.

The following questions all ask for the argument's main point:

Which of the following most accurately expresses the main conclusion of the author's argument?

Which of the following most accurately expresses the conclusion drawn in the argument?

The argument is structured to lead to which of the following conclusions?

Question: June 2007, Section 3, Question 12

This argument has a very common structure:

Counterevidence

Novel X and Y contain similar themes and situations.

Counterclaim

One might suspect one of the authors of plagiarism.

Main Point, introduced by the ***Transition Keyword*** "*however*":

It is more likely the similarities are coincidental.

Evidence, introduced by the ***Evidence Keyword***, "*since*":

Both authors come from similar backgrounds and have led similar lives.

This is the most common structure of the arguments that precede ***Main Point Questions***.

The ***Main Point*** of an argument must address any ***controversial element*** and must address any ***judgment*** the author makes. For this reason, (D) is the author's *Main Point*. (A), (B), and (C) are all technically true, but they play different roles in the argument.

(D) is **CORRECT**.

(A) is ***Counterevidence***: what the author acknowledges is true, but what supports a conclusion that the author opposes.

(B) is a ***Counterclaim***: a conclusion usually, but not always, supported by *Counterevidence*, that the author rejects.

(C) is ***Evidence***: what supports the author's conclusion. It is important to note that only one statement in this argument can be classified as ***evidence***. The other factual statement in the argument is ***counterevidence***: the author does not deny the truth of the counterevidence, but it works against the author's conclusion and so therefore should not be classified as ***evidence***.

(E) is another answer choice that the author most certainly believes is true, but it is not the ***main point***. (E) is a ***conditional statement***, which is any statement that can be expressed as an *if/then* statement. The author stated the conclusion ***unconditionally***: there was no *if* or equivalent word in the conclusion. For this reason, the *main point* ***cannot*** be a ***conditional statement***. (E) is actually an ***assumption*** of the argument. We'll be discussing ***assumptions*** a great deal in Chapter 5!

In a *Main Point Question*, You are much more likely to see a *Transition Keyword* introduce a *Main Point* than a *Conclusion Keyword*!

If the test writers placed a ***Conclusion Keyword*** immediately before the ***main point***, the question would be too easy. In fact, in ***Main Point Questions***, a ***Conclusion Keyword*** might precede a *conclusion that is not the author's main point: an intermediate conclusion.* These will be discussed shortly.

Evidence Keywords

After All
Because
For
Given That
Since

Conclusion Keywords

Accordingly
Consequently
Ergo
Hence
It follows that
Thereby
Therefore
Thus

Transition Keywords

Although
But
Despite
However
Nevertheless
Yet

The following argument structure is one of the most common on the LSAT, particularly in ***Main Point Questions***

Counterevidence and/or Counterclaim
Transition Keyword, ***Conclusion***
Evidence

Regarding the ***Conclusion Keyword*** "*thus*":

English language purists get upset when they see the word ***thus*** used in a manner equivalent to ***therefore***. According to the purists, "*thus*" means "*in this way or manner*." When Romeo, of *Romeo and Juliet*, says "*Thus with a kiss I die,*" he is not concluding an argument that sought to prove that kissing is a cause of death: he is describing the manner of his death. The purists, full of sound and fury, may protest all they want; so long as the LSAT uses ***thus*** as a Conclusion Word, so shall we.

The LSAT can, however, use ***thus*** in the manner the purists prefer. We have already noted how Conclusion Words may precede a statement that is not the main conclusion. In some cases, thus might precede a statement that is not a conclusion at all!

Regarding the ***Evidence Keyword*** *"because":*

Sometimes ***because*** does not introduce an *evidence statement*. It can be part of a conclusion when that conclusion is a causal one:

I prayed for rain in California, and then it rained in California.
Therefore, it rained in California because I prayed for rain.

In this very poor argument, the entire second sentence is the *main conclusion*. Obviously the *main conclusion* isn't just "*it rained in California*"; the *main conclusion* is clearly attempting to prove a *causal connection* between prayer and rain.

Question: June 2007, Section 2, Question 10

"***Should***" is an extremely important word in an argument. ***Should*** usually implies that the author has made a ***judgment***, and if an argument contains such a ***judgment***, the ***main point*** will contain a similarly worded ***judgment***.

*If there is **evidence** about what **should** or **ought to** be true, the **conclusion** will establish what **should** or **ought to** be true.*

Knowing this, this question can still be difficult, as there were two claims that contained the word ***should***. So how does this argument fit together?

First statement

*Double-blind techniques **should** be used whenever possible*

Middle statement

Double-blind techniques help prevent misinterpretations

The last statement

*Scientists **should** try to avoid such misinterpretations*

It is quite clear that the middle statement, the first part of the second sentence, is a ***premise***. When confronted with an argument that contains claims about what ***is*** true and what ***ought to*** be true, the ***main point*** must be one of the *judgments*, one of the ***ought to be true,*** or **should**, statements. But which one is the ***main point***? It is not the last statement, because that statement fails to mention "*double-blind techniques*", and the ***main point*** must addresses all the major elements of the argument. Also, the last statement is introduced by the ***Continuation Keyword*** "*and*." ***Continuation Keywords never introduce conclusions***, because *such words always indicate that what follows is in some sense equal to what came before*. There can only be one ***main point***, and that ***main point*** cannot be equal to any other statement. If a statement is introduced by a ***Continuation Keyword***, that statement is almost always a ***premise***.

This subtle point about ***Continuation Keywords*** can be very helpful when confronted with difficult ***Role of Statement*** questions.

You are always better off determining the ***main point*** before you get to the answer choices. If you are stuck between two answer choices, however, you can always use the "*Because Answer Choice **X**, Therefore Answer Choice **Y***" test.

Let's say you are down to (B) and (D), the two answer choices that best describe the two ***should*** claims from the argument. You will create two *mini-arguments* and decide which of the two is more reasonable.

The first mini-argument: *Because (B), Therefore (D)*.

Because it is advisable for scientists to use double-blind techniques as much as possible, therefore, whenever possible, scientists should refrain from interpreting evidence on the basis of previously formed expectations.

This argument makes very little sense, so (D) is unlikely to be the ***main point***.

The second mini-argument: *Because (D), Therefore (B)*

Because, whenever possible, scientists should refrain from interpreting evidence on the basis of previously formed expectations, it is advisable for scientists to use double-blind techniques as much as possible.

This claim makes much more sense, making (B) likely to be the ***main point***.

This time-consuming technique only works when you are certain both answer choices are stated in the argument, and when one is the ***main point*** and the other is a ***premise***.

(B) is **CORRECT**. "*Advisable for scientists to use*" is equivalent to "*Scientists should use*."

The incorrect answer choices.

(A) A paraphrase of the second statement, or first ***premise***, of the argument.

(C) This statement is probably true on the basis of the first ***premise***, but does not contain the ***judgment*** in the argument's conclusion.

(D) A paraphrase of the third statement, or second premise.

(E) This answer choice praises *double-blind studies*, but does not capture the judgment that they "*should be used*." Also, consider how ***strong*** the language

is: the answer choice states that double-blind techniques are "***often*** an effective way of ***ensuring*** scientific objectivity." The argument stated that double-blind techniques ***should be used*** whenever possible. It never went so far as to say that that they ***are often*** used, or that they ***ensure***, that they ***guarantee***, scientific objectivity. This answer choice contains ***Language of Unsupported Strength***.

Continuation Keywords

And
Also
Furthermore
Moreover

Another very common argument structure for a ***Main Point Question***:

Main Point
Evidence

If there is more than one evidence statement, the statements usually will be joined by a ***Continuation Keyword****. A* ***Continuation Keyword*** *can never introduce a* ***main point.***

When an argument begins with a ***judgment*** *that is* ***unattributed,*** *as in the previous argument, that judgment is usually the* ***main point****.*

When an argument begins with a ***judgment*** *that* ***is attributed*** *to someone or some group other than the author, that judgment is usually a* ***counterclaim****.*

If there is ***evidence*** *about what* ***should*** *or* ***ought to*** *be true, the* ***conclusion*** *will establish what* ***should*** *or* ***ought to*** *be true.*

This is the first of the Most Difficult Logical Reasoning Questions ever! Good luck!

Question: Prep Test 16 (September 1995), Section 3, Question 19
(page 305 of *10 Actual, Official LSAT Preptests*).

When confronted with a ***Main Point Question***, do not expect the ***main point*** to be clearly stated in the last sentence of the argument. In the case of this argument, the presence of the ***Conclusion Keyword*** "*therefore*" in the last sentence should make you even more suspicious that the actual ***main point*** lay elsewhere.

The last claim, "*therefore, (a state's) degree of control is partial*", is actually an ***Intermediate Conclusion*****.** It is ***not*** a ***premise***, which by definition is an ***unsupported*** claim. But it cannot be the ***main point*** because the argument's logic does not end at the last sentence. The last sentence supports the second sentence; we know that this is the case because the last sentence begins with the phrase "*This is because…"* The second sentence establishes that there is no such thing as a political entity exercising "*total state control*." The previous statement, after the colon, establishes that "*calling a state totalitarian implies total state control*."

Since "*total state control*" does not exist, the argument concludes that one cannot "*call a state totalitarian*."

There are a few important points about the first sentence that make it a strong contender for the ***main point***, even before you read the rest of the argument.

1. **It contains a *judgment*.** Whenever the argument makes a specific judgment, that judgment almost always is the main point. An argument cannot call another claim "*misleading*," shift to a related matter, and reach a ***main point*** that ignores the original, rejected claim.
2. **It contains an "*interesting idea."*** In case you are completely ignorant of 20th century history, totalitarianism was a big deal. Scholars still debate the significance of the concept: the debate between James and Maria is actually a simplified version of common academic disagreement. An argument will rarely, if ever, mention a hugely important concept and then reach a ***main point*** fails to mention that concept. Unless you find specific evidence that "*totalitarian*" or some other big-idea is merely an example of a more general phenomenon, expect that word to be a part of ***main point***.

3. **It is an unattributed, strongly worded claim.** When the first sentence is stated strongly and not attributed to any other source, it is usually the author's ***main point.*** When an argument begins with a vague attribution, such as "*some people think*," "*some scientists hypothesize*," or "*some critics argue*," the ***main point*** is usually a ***rejection*** of that first claim.

(A) **CORRECT**. The first statement is Maria's ***main point***.

(B) defines an ***implication*** of a *totalitarian state*. This is an ***unsupported*** statement made by Maria and therefore a ***premise***.

(C) is an ***intermediate conclusion***, introduced by the ***Conclusion Keyword*** "*therefore*."

(D) is another ***intermediate conclusion***. "*This is because*" follows a ***conclusion*** and precedes ***a premise.***

(E) is an unsupported premise introduced by the ***Evidence Keyword*** "*because*".

An ***intermediate conclusion*** is a statement supported by at least one premise which itself supports the ***main point.***

Question Type: Logical Completion (Blank Space Question)

Most ***Logical Completion Questions*** are simply ***Main Point Questions***. However, if an *Evidence* or *Continuation Keyword* precedes the blank space, the question is actually asking for a missing ***premise*** of the argument.

The following are examples of *Logical Completion Questions*:

Which one of the following most logically completes the philosopher's argument?

Which one of the following most logically completes the argument?

Which of the following best completes the argument?

Question: June 2007, Section 2, Question 8

Because the blank space is preceded by the ***Conclusion Keyword*** "*thus*", the ***main point*** of this argument will answer this question.

This argument has the following structure:

Counterclaim:

Proponents of the electric car maintain….that (the electric car) will result in an abatement of the environmental degradation caused by auto emissions.

Premises, introduced by the ***Transition Word*** "*but*":

Unless we damn more rivers, the electricity to charge the electric car will come nuclear or coal-fired power plants.
Each of these power sources produces environmental damage.

Conclusion: the ***main conclusion*** is the correct answer to this question**.**

The author clearly intends to reject the claim made by the "*proponents of the electric car*." This ***counterclaim*** is that the electric car will lead to an abatement of environmental degradation caused by auto emissions, i.e., that the electric car will eliminate the bad environmental effects of automobile use. The ***conclusion*** is a rejection of this claim: the ***conclusion*** is that the electric car will ***not*** eliminate the bad environmental effects of automobile use.

(A) **CORRECT**. We can conclude that the author believes that the electric car will have some negative environmental effects, and so the effects will be *worse than the proponents believe*.

(B) The argument is not about the "*popularity*" of the electric car.

(C) While technical problems are mentioned in the ***counterclaim***, they are not directly relevant to argument.

(D) The author never claims that the electric car will produce ***more*** emissions.

(E) This answer choice is the most commonly chosen incorrect answer, because it seems to conclude the argument. It is inferior to (A), however, because the author never claimed that electric cars would, on the whole, be *worse* for the environment than are conventional cars. Electric cars could still be better overall for the environment and produce "***a net reduction** in environmental degradation*" even if they are not as perfect as the proponents claim.

Sometimes, students choose (E) over (A) because (A) seems *stronger* than (E). Most LSAT courses will teach that a *stronger* answer choice is *inferior* to a weaker one. The tactic of eliminating the *stronger* answer choice can be useful, but the tactic is not always appropriate, and when appropriate, it must be used carefully. It is more fully discussed after the next question.

With regard to this question, the "*worse"* in (A) sounds *stronger*, and therefore much worse, than the *no net reduction* in (E)! But we have to consider what (A) really means: it states that the environmental consequences of the electric car will be *worse* than the proponents ***believe***. The proponents *believe* that the electric car will result in an *abatement* of negative environmental effects: it will have ***no negative effects***! In other words, electric car will be perfect for the environment! The argument concludes that the electric car is an imperfect solution, but it still could be an improvement over traditional cars. (E) goes even further and states that the electric car will result in *no net reduction* of negative environmental effects. (E) is actually *stronger*, because it states not only that the electric car is imperfect but also that it will not be an improvement!

In this question, as in the first question,

*Understanding the **counterclaim** is absolutely necessary to accurately describe an argument's conclusion!*

Question Type: Role of Statement Questions

These questions ask about the role of a particular statement in the argument. The following are examples of ***Role of Statement Questions***:

The claim attributed to the geologist plays which of the following roles in the argument?

The claim that the economy is heading out of the recession plays which of the following roles in the argument?

Which of the following best describes the function in the argument of the claim that ancient reptiles may have been warm-blooded?

Question: June 2007, Section 2, Question 11

This argument has a common structure:

Counterclaim

Electronic media have corroded the intellectual skills required and fostered by the literary media.

Evidence, introduced by the ***Transition Keyword*** "*but*":

Several centuries ago the complaint was that certain intellectual skills…were being destroyed by the spread of literacy.

Main Point, introduced by the ***Conclusion Keyword*** "*so*"

What awaits us is probably a mere alteration of the human mind rather than its devolution.

The question asks you about the second sentence. It is often not enough to simply recognize the statement as "*evidence*". There will often be more than one answer choice that correctly labels what ***argument component*** the statement is. When this is the case, the correct answer must accurately describe the rest of the argument.

(C) **CORRECT.** The statement is an "*example of a cultural change*" and that change did "*not necessarily*" have a negative impact on the human mind.

(A) This answer choice starts out promisingly by correctly describing the statement as "*evidence*." But the remainder of the answer is choice distorts the argument's conclusion.

(B) An "***illustration***" is another word for "***example***." It is true that the *complaint of several centuries ago* is an ***example*** of a complaint like the contemporary complaint that electronic media is *corroding* literary skills. But this example is not offered in support of a "*general hypothesis*" that intellectual skills are "***inseparable** from the means by which people communicate*." This answer choice can be correct only if that *hypothesis* is the argument's *conclusion*, and it is not. A ***hypothesis*** is a "*testable proposition*." One could call the argument's conclusion a *hypothesis* – any prediction or theory is a *hypothesis* – but ***not*** the *hypothesis* that intellectual skills are ***inseparable*** from the means by which people communicate.

Answer choice (B) is what I call a ***Babelchoice***: an answer choice that incorrectly describes an argument by combining difficult, technical language with some legitimate content from the argument.

(D) This choice starts out promisingly by correctly describing the statement as "*evidence*." This answer choice, more subtly than those other incorrect answer choices, also distorts the argument. The *complaint of several centuries* ago is not ***evidence*** that undermines a claim about the contemporary loss of literary skills. The *complaint* is ***evidence*** that in the past technological change has given rise to fears of human "*devolution*." Also, the author never argues that the claim that certain literary skills are being lost is ***unwarranted***. The author argues that literary skills might indeed be lost, but that this loss is not necessarily as terrible as predicted.

(E) This answer choice completely misunderstands the statement. The complaint of several centuries ago was never "*dismissed*."

When trying to quickly eliminate incorrect answer choices on ***Main Point, Role of Statement***, and the upcoming ***Method of Reasoning Questions***, you have a very useful tactic: you can ***eliminate any answer choice that contains language that is stronger than that in the argument***. So, "***inseparable"*** in (B) and "***unwarranted"*** in (D) make those answer choices less likely to be correct. With regards to (B), it is clear that the author believes that there is some connection between intellectual abilities and the means used to communicate. But the author never goes so far as to claim that intellectual abilities and means used to communicate are ***inseparable*** - *impossible to separate*. With regards to (D), the author never states that the

prediction that certain literary skills will be lost is ***unwarranted***. Because these answer choices contain ***Language of Unsupported Strength***, they can be quickly eliminated.

Similarly, the *weakness* of the phrase "***not necessarily***" makes (C) more likely to be correct. The author's conclusion was that what awaits us is "*probably a mere alteration of the human mind rather than its devolution.*" The language in the answer choice (a detrimental result will ***not necessarily*** happen) is actually *weaker* than the language in the argument's conclusion (a detrimental result will ***probably not*** happen). The weaker language makes this somewhat confusing answer choice easier to choose! When asked to describe an argument, or, as you will in the next chapter, choose the most strongly supported ***inferences*** from a set of facts, language that is weaker than that in the argument is to be preferred.

This tactic is often misunderstood. I am ***not*** *claiming that weak language is always better than strong language*. I am certainly not claiming that correct answers always contain weak language! I am claiming that ***Language of Unsupported Strength***, language that is stronger than that in the argument, will make an answer choice incorrect.

> ***Role of Statement Questions*** *are particularly difficult when multiple answer choices correct describe the statement's role; when this is the case some of those incorrect answer choices that correctly describe the statement's role will distort the argument's conclusion.*

> *Eliminating answer choices that contain* **Language of Unsupported Strength** *is a very useful tactic on* **Main Point** *and* **Role of Statement Questions***. But do not fall into the trap of concluding that strength is always bad and weakness is always good!*

> *Beware of* **Babelchoices****: answer choices that combine some content from the argument with difficult, often technical language to create a statement that, with respect to the argument, is meaningless.*

* The name **Babelchoice** is in honor of the "*Babelfish*," a creation of the late, great author Douglas Adams. Adams wrote the *Hitchhiker's Guide to the Galaxy,* a treasury of absurd reasoning and a veritable nerd-bible for those of us who came of age in 80s and 90s.

There is in language a ***hierarchy of strength***. Understanding this ***hierarchy*** is very useful for determining whether an answer choice contains ***Language of Unsupported Strength***.

The strongest words are words that describe what is ***necessary*** or ***must be true***. These include "*all*" and "*always*" and their synonyms:

All
Always
Depends
Each
Every
Guarantees
Must
Necessary
Only
Sufficient
Whatever
Whoever

Less strong are those that describe ***probability***, what is ***likely to be true***. These include "*most*" and "*usually*" and their synonyms.

Generally
Likely
Majority
Most
Probably
Usually

The ***weakest*** words are those that describe ***possibility***, what ***could be true***. These include "*some*" and "*sometimes*" and their synonyms.

Can
Could
Might
Possible
Some
Sometimes

In the negative, the ***strongest*** words describe what ***cannot be true***. These include words like "*no*", "*none*," "*never*" and their synonyms.

Cannot
Impossible
Never
None

In the negative, ***weaker*** words or phrases describe what is ***unlikely***. These include phrases like "*Most…not*" and "*usually do not*" and their synonyms.

Improbable
Most…not
Seldom
Unlikely
Unusual

In the negative, the ***weakest*** words or phrases describe what "***might not***" be true. These include phrases like "***not all***" and "***not always***" and their synonyms.

Insufficient
Some...not
Not Always
Not All
Not Necessary

In addition to the words listed above, you can think of the degree of adjectives as indicative of their strength.

The ***strongest*** adjectives and adverbs are ***superlative***:

Best
Worst
Fastest
Slowest
Most Effective
Least Effective

Less strong are comparative:

Better
Worse

Faster
Slower
More Effective
Less Effective

The root form of each of these adjectives (called the "*positive*" form) is ***not always easier to support*** than the *comparative* and *superlative* forms.

Good
Bad
Fast
Slow
Effective
Ineffective

For example, a turtle might be faster than a snail, but it would be in most cases unreasonable to call either animal "*fast*."

On **Main Point, Role of Statement,** *and the upcoming* **Method of Reasoning Questions***, you can eliminate answer choices that contain language that is stronger than that in the argument,* ***Language of Unsupported Strength****.*

Question Type: Method of Reasoning Questions

These questions all ask you, "*What does the argument do*?" Or, as *LSAC* sometime puts it, "*How does the argument go*?" Here are some examples of ***Method of Reasoning Questions*.**

The argument proceeds by

Which of the following best describes how the biologist reaches the conclusion drawn above?

Which of the following best describes the paleontologist's strategy of argumentation?

Like ***Main Point*** and ***Role of Statement Questions***, these questions ask you to describe the argument. An answer choice that contains language stronger than that in the argument, ***Language of Unsupported Strength***, will be incorrect.

Question: June 2007, Section 2, Question 20

The argument has the following structure:

(The *Counterevidence* and *Counterclaim* are attributed to Munoz)

Counterevidence

The Association overwhelmingly opposes the new water system.

Counterclaim

This opposition suggests that there is widespread city opposition to the new water system.

Premises

Only 25 of 350 members of the Association voted on the resolution opposing the water system, and 10 voted in favor of the system.
The votes against the new water system represent a very small percentage of Hopeville's residents

Conclusion

These few votes do not necessarily represent that majority of Hopeville's residents: Munoz is wrong and there may not be widespread opposition to the new water system.

Before reading the answer choices, you should predict what *elements* the correct answer will contain: the correct answer must address the fact that *Gamba*, the author, countered another argument, the argument one attributed to *Muñoz*. The correct answer must address ***how*** Gamba countered that argument. The correct answer might be very abstract – "*Gamba presented counterevidence undermining an interpretation of statistical data.*" – or very specific to the argument – "*Gamba demonstrated that the number of votes against the new water system is a very small percentage of the total population*" – or somewhere in between.

(E) **CORRECT**. This answer choice matches one of the predictions made above. Note that the answer is somewhat abstract: this answer choice could describe many similar arguments.

(A) Gamba never addressed what made an Association member more or less likely to vote.

(B) It is actually Gamba who uses statistics, and Gamba never makes the claim that statistics are so easy to manipulate. Also, the "*to support **whatever** view*" makes this choice easier to eliminate: it contains ***Language of Unsupported Strength**.*

(C) This answer choice is tempting: abstract answer choices like this are often correct. But Gamba does not acknowledge the ***truth*** of Muñoz's ***only premise***, which is that the Association ***overwhelmingly*** opposes the new water system.

(D) Gamba did a good job of *disconfirming* the *counterevidence*. This ***Babelchoice*** is meant to be deliberately confusing, but, as Gamba showed, there is nothing about Muñoz's evidence that makes it "*impossible to disconfirm.*"

***Method of Reasoning Questions** ask for a description of how the argument reached its conclusion. As with **Main Point** and **Role of Statement Questions**, you can and should predict the main elements of the correct answer.*

Some ***Method of Reasoning Questions*** require you describe the relationship between two arguments.

Remember Maria's argument about *totalitarianism*? It's back, this time preceding a *Method of Reasoning Question*. When this argument originally appeared on the September 1995 LSAT, it was followed by two questions, a ***Main Point Question*** and a ***Method of Reasoning Question***.

On the contemporary LSAT, we no longer see two questions follow one argument.

Question: Prep Test 16 (September 1995), Section 3, Question 20
(page 305 of *10 Actual, Official LSAT Preptests)*

James' argument has the following structure:

Conclusion

A one-party state that has tried to exercise control....is totalitarian

Evidence

The term "totalitarian" describes not "the actual degree of control", but rather the "state's ambitions."

It important to note that James acknowledges that state systems of control have "*practical inefficiencies*": he accepts *some* of Maria's evidence, but denies her ***definition*** of the term "*totalitarian*," and thus denies her conclusion.

(D) **CORRECT.** This is the only choice that describes how James challenged Maria's ***definition*** of the term "*totalitarian*".

(A) James disputes Maria's definition of "*totalitarian*." He never claims that Maria's argument is self-contradictory. He probably would accept her conclusion if he agreed with her definition of *totalitarian*.

(B) There is no "*explanation*" of why totalitarianism exists in James' argument.

(C) James does the opposite of this: he accepts some of Maria's evidence - those *practical inefficiencies* of s*tate control* - while challenging her conclusion: what she ***infers***.

(E) James rejects Maria's definition of *totalitarian*, and so rejects one of her crucial ***premises*** in reaching his conclusion.

Question: Prep Test 18 (December 1992), Section 4, Question 21
(page 348 of *10 Actual, Official LSAT Preptests*)

This is the second of the Most Difficult Logical Reasoning Questions ever! Good luck!

Jane's argument has the following structure:

Conclusion

Harper's ideas have no value.

Premise, introduced by the ***Evidence Keyword*** "*because*":

There is no general agreement among musicians about what a guitar should sound like.

Intermediate Conclusion, introduced by the ***Conclusion Keyword*** "*consequently*"

There is no widely accepted basis for judging a guitar's sound.

Mark's argument has the following structure:

Premises

If Harper's ideas resulted in superior sound, they would have been adopted by now
The Torres guitar design has been almost universally adopted

Implied Conclusion

Harper's ideas do not result in superior sound.

We can *conclude* that Mark believes that Harper's ideas do not result in superior sound, because the premises together *imply* this conclusion. Perhaps Mark might not go so far as to say that Harper's ideas have "*no value*", but it is clear that both Jane and Mark are critical of Harper.

Jane's and Mark's conclusions are similar, but their premises differ. Jane claims that there is "*no widely accepted basis*" for judging a guitar's sound, while Mark claims that the Torres design has been "*almost universally adopted*." These two strongly worded claims ***contradict*** one another.

(E) **CORRECT**. "***Supposition***" is another word for ***premise***, but it is not seen on the contemporary LSAT. A "***presupposition***" is an ***assumption***.

(A) Mark does not point out a "*weakness*" in Jane's argument.

(B) Mark and Jane's arguments each have ***conflicting*** premises.

(C) Mark and Jane's arguments each have *similar* ***conclusions***.

(D) Mark and Jane might have similar conclusions, but their ***premises***, and therefore their ***arguments***, are quite different.

Question: Prep Test 15 (June 1995), Section 3, Question 17
(page 274 of *10 Actual, Official LSAT Preptests*)

The structure of X's argument:

Conclusion

Medical research on animals ***should not*** *be reduced*

Premises, introduced by the ***Evidence Keyword*** "*because*"

Such research averts human suffering
In such research a trade-off between human and animal welfare is ***always inevitable.***
We ***should*** *give greater weight to human welfare.*

Y's response:

Research currently done on animals could be done on human volunteers or with computers without ***any*** *animal suffering.*

The question characterizes Y's statement as a "*response*" not an "*argument*." This is because Y does not provide a fully formed argument, but what he says does relate to X's argument. By claiming that research currently done on animals could be done on computers and animal suffering could thereby be avoided, Y is challenging X's second premise.

(A) **CORRECT**. Some test takers are scared by the strength of ***contradicts***, but that verb is entirely appropriate here. *X* uses *strong language*: "a trade-off between human and animal welfare is ***always inevitable***. All *Y* needs to do to contradict that claim is to propose one means to avoid that *trade-off*. *Y* does this by establishing that research can be done with computer modeling or human subjects "without causing ***any*** suffering."

(B) *Y* never addresses *X*'s premise about the "*weight*" that should be given to human versus animal suffering.

(C) *Y* does not address the "*consequences*" of *X*'s argument. See ***Prep Test 30 (December 1999), Section 4, Question 16*** for an example of an argument that criticizes another argument by citing its consequences.

(D) By contradicting a premise of *X*'s argument, *Y* ***weakens***, and does not ***strengthen***, *X*'s argument.

(E) *Y* ***contradicts*** a premise of *X*'s argument; one would not therefore say that *Y* "*supplies*" a premise to *X*'s argument.

(D) and (E) also make very similar claims. To "*supply to premise*" to an argument is to ***strengthen*** an argument. If two answer choices are ever equivalent, they are both incorrect, because there cannot be two correct answers!

In most of the questions covered thus far, *strong language* has played an important role. In some cases, the language in an answer choice was too strong for the argument, and so the answer choice was said to contain ***Language of Unsupported Strength***. In other cases, the *strong language* in the one of the speakers' arguments allowed us to see the precise nature of the speakers' *disagreement*. Paying attention to *strong language* is extremely important in *argument analysis* and in choosing correct answers. In fact, I would argue that, because *strong language* is so important for every question type, how well you identify ***strong language*** and how well you identify the ***components of an argument*** are the ***primary learnable determinants of success*** on the ***Logical Reasoning*** section (such awareness is also crucial on the ***Reading Comprehension*** section!).

One additional point about *Main Point, Logical Completion, Role of Statement* and *Method Questions*: these questions usually follow reasonable arguments, so these questions give you a sense of what the LSAT authors consider to be "good" reasoning. These questions are not looking for an answer choice that is critical of the argument. Even if you do not think the argument is a reasonable one, be very skeptical of an answer choice that is critical. The task in these questions is ***not to criticize*** the argument ***but to describe*** the legitimate kinds of reasoning employed by different arguments.

> *Method of Reasoning, as well as Main Point, Logical Completion, and Role of Statement Questions, usually follow* ***reasonable*** *arguments. In these question types, avoid answer choices that are critical of the argument.*

The two primary tasks for a 170 plus score on the Logical Reasoning section:

Identifying Argument Structure
Identifying Strong Language.

The following practice problems are from the *Green Blues.*

Prep Test 7

Section 1: 5, 6, 7, 18
Section 4: 2, 16, 20, 21

Prep Test 9

Section 2: 3, 11, 15, 20
Section 4: 9, 18, 20

Prep Test 10

Section 1: 4, 11, 12
Section 4: 3, 13, 25

Prep Test 11

Section 2: 3, 8, 14, 20
Section 4: 2, 8, 10, 12, 24

Prep Test 12

Section 1: 1, 3, 6, 9
Section 4: 10, 14

Prep Test 13

Section 2: 2, 9, 17
Section 4: 1, 3, 6

Prep Test 14

Section 2: 8, 9, 14, 19
Section 4: 16, 24

Prep Test 15

Section 2: 8, 11, 14, 24
Section 3: 1, 4, 11, 15, 17, 21

Prep Test 16

Section 2: 17, 23
Section 3: 7, 19, 20, 25

Prep Test 18

Section 2: 1, 5, 7, 10, 12, 18
Section 4: 2, 4, 21

The following practice problems are from the *Ancient Ones*.

Prep Test 1

Section 3: 13
Section 4: 5, 19, 20

Prep Test 2

Section 2: 6, 8, 12
Section 4: 3, 19, 24

Prep Test 3

Section 2: 6, 18, 24
Section 4: 20

Prep Test 4

Section 1: 6, 17, 18, 21
Section 4: 18

Prep Test 5

Section 1: 6, 9
Section 3: 3,4, 19

Prep Test 6:

Section 2: 1, 18, 20
Section 3: 12, 21, 23, 26

Prep Test 8:

Section 1: 15, 18
Section 4: 17

Prep Test 17

Section 3: 4, 6, 9, 18, 19
Section 4: 4, 10