# POWERSCORE TEST PREPARATION

# LSAT LOGICAL REASONING BIBLE

A Comprehensive System for Attacking the Logical Reasoning Section of the LSAT

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## C HAPTER ONE: INTRODUCTION

#### Introduction |

Welcome to the *PowerScore LSAT Logical Reasoning Bible*. We congratulate you on your savvy purchase—you have bought the most advanced book ever published for the LSAT Logical Reasoning section. The purpose of this book is to provide you with a powerful and comprehensive system for attacking the Logical Reasoning section of the Law School Admission Test (LSAT), and by thoroughly studying and correctly applying this system we are confident you will increase your Logical Reasoning score.

This book has been carefully designed to reinforce your understanding of the concepts behind the Logical Reasoning section. The concepts and techniques discussed herein are drawn from our live LSAT courses, which we feel are the most effective in the world. As we progress through the chapters, we will prove how well the PowerScore methodology works by applying the techniques to real LSAT questions. Throughout the book you will encounter real questions drawn from actual LSATs, and all questions are used with the permission of Law Services, the producers of the LSAT. The use of real questions is essential to your success on the LSAT, and no question in this book has been modified from its original form.

In order to apply our methods effectively and efficiently, we strongly recommend that you carefully read and re-read each of the discussions regarding arguments, concepts, and question types. We also suggest that as you finish each question you look at both the explanation for the correct answer choice and the explanations for the incorrect answer choices. Closely examine each problem and determine which elements led to the correct answer, and then study the analyses provided in the book and check them against your own work. By doing so you will greatly increase your chances of recognizing the patterns present in all Logical Reasoning sections.

This book also contains a variety of drills and exercises that supplement the discussion of techniques and question analysis. The drills help strengthen specific skills that are critical for LSAT excellence, and for this reason they are as important as the LSAT questions. In the answer keys to these drills we will often introduce and discuss important LSAT points, so we strongly advise you to read through all explanations.

On page 525 there is a complete quick-reference answer key to all problems in this book. The answer key contains a legend of question identifiers, as well as chapter-by-chapter answer keys and a unique reverse lookup that lists all questions used in this book sorted by the LSAT administration date and PrepTest number.

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If you are looking to further improve your LSAT score, we also recommend that you pick up a copy of the renowned *PowerScore LSAT Logic Games Bible*. The *Logic Games Bible* contains our system for attacking the Analytical Reasoning section of the LSAT. When combined with the *Logical Reasoning Bible*, you will have a formidable methodology for attacking the test. The *LSAT Logic Games Bible* is available through our website at www.powerscore.com and at fine retailers everywhere.

Because new LSATs appear every several months, and access to accurate and up-to-date information is critical, we have devoted a section of our website to *Logical Reasoning Bible* students. This free online resource area offers supplements to the book material, answers questions posed by students, and provides updates as needed. There is also an official book evaluation form that we strongly encourage you to use. The exclusive *LSAT Logical Reasoning Bible* online area can be accessed at:

#### www.powerscore.com/lsatbibles

If we can assist you in your LSAT preparation in any way, or if you have any questions or comments, please do not hesitate to contact us via email at lsatbibles@powerscore.com. Additional contact information is provided at the end of this book. We look forward to hearing from you!

#### A Brief Overview of the LSAT

The Law School Admission Test is administered four times a year: in February, June, September/October, and December. This standardized test is required for admission to any American Bar Association-approved law school. According to Law Services, the producers of the test, the LSAT is designed "to measure skills that are considered essential for success in law school: the reading and comprehension of complete texts with accuracy and insight; the organization and management of information and the ability to draw reasonable inferences from it; the ability to reason critically; and the analysis and evaluation of the reasoning and argument of others." The LSAT consists of the following five sections:

- When you take an actual LSAT, they take your thumbprint at the testing site. This is done in case of test security problems.
- 2 Sections of Logical Reasoning (short arguments, 24-26 total questions)
- 1 Section of Reading Comprehension (3 long reading passages, 2 short comparative reading passages, 26-28 total questions)
- 1 Section of Analytical Reasoning (4 logic games, 22-24 total questions)
- 1 Experimental Section of one of the above three section types.

You are given 35 minutes to complete each section. The experimental section is unscored and is not returned to the test taker. A break of 10 to 15 minutes is given between the 3rd and 4th sections.

The five-section test is followed by a 35 minute writing sample.

#### The Logical Reasoning Section

Each Logical Reasoning Section is composed of approximately 24 to 26 short arguments. Every short argument is followed by a question such as: "Which one of the following weakens the argument?" "Which one of the following parallels the argument?" or "Which one of the following must be true according to the argument?" The key to this section is time management and an understanding of the reasoning types and question types that frequently appear.

Since there are two scored sections of Logical Reasoning on every LSAT, this section accounts for approximately 50% of your score.

#### The Analytical Reasoning Section

This section, also known as Logic Games, is probably the most difficult for students taking the LSAT for the first time. The section consists of four games or puzzles, each followed by a series of five to eight questions. The questions are designed to test your ability to evaluate a set of relationships and to make inferences about those relationships. To perform well on this section you must understand the major types of games that frequently appear and develop the ability to properly diagram the rules and make inferences.

At the conclusion of the LSAT, and for five business days after the LSAT, you have the option to cancel your score. Unfortunately, there is no way to determine exactly what your score would be before cancelling.

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#### The Reading Comprehension Section

This section is composed of three long reading passages, each approximately 450 words in length, and two shorter comparative reading passages. The passage topics are drawn from a variety of subjects, and each passage is followed by a series of five to eight questions that ask you to determine viewpoints in the passage, analyze organizational traits, evaluate specific sections of the passage, or compare facets of two different passages. The key to this section is to read quickly with understanding and to carefully analyze the passage structure.

#### **The Experimental Section**

Each LSAT contains one experimental section, which does not count towards your score. The experimental can be any of the three section types described above, and the purpose of the section is to test and evaluate questions that will be used on *future* LSATs. By pretesting questions before their use in a scored section, the experimental helps the makers of the test determine the test scale. To learn more about the experimental section, we suggest you visit the PowerScore website, where you can find an extensive discussion of the experimental section, including how to identify the section and how to approach the section.

#### **The Writing Sample**

A 35-minute Writing Sample is given at the conclusion of the LSAT. The Writing Sample is not scored, but a copy is sent to each of the law schools to which you apply.

The format of the Writing Sample is called the Decision Prompt: you are asked to consider two possible courses of action, decide which one is superior, and then write a short essay supporting your choice. Each course of action is described in a short paragraph and you are given two primary criteria to consider in making your decision. Typically the two courses of action each have different strengths and weaknesses, and there is no clearly correct decision.

Do not agonize over the Writing Sample; in law school admissions, the Writing Sample is usually not a determining element for three reasons: the admissions committee is aware that the essay is given after a grueling three hour test and is about a subject you have no personal interest in; they already have a better sample of your writing ability in the personal statement; and the committee has a limited amount of time to evaluate applications.

For many years the Writing Sample was administered before the LSAT.

You must attempt the Writing Sample! If you do not, Law Services reserves the right not to score your test.

#### The LSAT Scoring Scale

Each administered LSAT contains approximately 101 questions, and your LSAT score is based on the total number of questions you answer correctly, a total known as the raw score. After the raw score is determined, a unique Score Conversion Chart is used for each LSAT to convert the raw score into a scaled LSAT score. Since June 1991, the LSAT has utilized a 120 to 180 scoring scale, with 120 being the lowest possible score and 180 being the highest possible score. Notably, this 120 to 180 scale is just a renumbered version of the 200 to 800 scale most test takers are familiar with from the SAT, GRE, and GMAT. Just drop the "1" and add a "0" to the 120 and 180.

Although the number of questions per test has remained relatively constant over the last eight years, the overall logical difficulty of each test has varied. This is not surprising since the test is made by humans and there is no precise way to completely predetermine logical difficulty. To account for these variances in test "toughness," the test makers adjust the Scoring Conversion Chart for each LSAT in order to make similar LSAT scores from different tests mean the same thing. For example, the LSAT given in June may be logically more difficult than the LSAT given in December, but by making the June LSAT scale "looser" than the December scale, a 160 on each test would represent the same level of performance. This scale adjustment, known as equating, is extremely important to law school admissions offices around the country. Imagine the difficulties that would be posed by unequated tests: admissions officers would have to not only examine individual LSAT scores, but also take into account which LSAT each score came from. This would present an information nightmare.

The LSAT Percentile Table

It is important not to lose sight of what LSAT scaled scores actually represent. The 120 to 180 test scale contains 61 different possible scores. Each score places a student in a certain relative position compared to other test takers. These relative positions are represented through a percentile that correlates to each score. The percentile indicates where the test taker ranks in the overall pool of test takers. For example, a score of 163 represents the 90th percentile, meaning a student with a score of 163 scored better than 90 percent of the people who have taken the test in the last three years. The percentile is critical since it is a true indicator of your positioning relative to other test takers, and thus law school applicants.

Charting out the entire percentage table yields a rough "bell curve." The number of test takers in the 120s and 170s is very low (only 1.9% of all test takers receive a score in the 170s), and most test takers are bunched in the middle, comprising the "top" of the bell. In fact, approximately 40% of all test takers score between 145 and 155 inclusive, and about 70% of all test takers score between 140 and 160 inclusive.

Since the LSAT has 61 possible scores, why didn't the test makers change the scale to 0 to 60? Probably for merciful reasons. How would you tell your friends that you scored a 3 on the LSAT? 123 sounds so much better.

There is no penalty for answering incorrectly on the LSAT. Therefore, you should guess on any questions you cannot complete.

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The median score on the LSAT scale is approximately 151. The median, or middle, score is the score at which approximately 50% of test takers have a lower score and 50% of test takers have a higher score. Typically, to achieve a score of 151, you must answer between 56 and 61 questions correctly from a total of 101 questions. In other words, to achieve a score that is perfectly average, you can miss between 40 and 45 questions. Thus, it is important to remember that you do not have to answer every question correctly in order to receive an excellent LSAT score. There is room for error, and accordingly you should never let any single question occupy an inordinate amount of your time.

#### The Use of the LSAT

The use of the LSAT in law school admissions is not without controversy. Experts agree that your LSAT score is one of the most important determinants of the type of school you can attend. At many law schools an admissions index consisting of your LSAT score and your undergraduate grade point average is used to help determine the relative standing of applicants, and at some schools a sufficiently high admissions index guarantees your admission.

For all the importance of the LSAT, the exam is not without flaws. As a standardized test currently given in the paper-and-pencil format, there are a number of skills that the LSAT cannot measure, including listening skills, note-taking ability, perseverance, etc. Law Services is aware of these limitations and on an annual basis they warn all law school admission offices about overemphasizing LSAT results. Still, because the test ultimately returns a number for each student, the tendency to rank applicants is strong. Fortunately, once you get to law school the LSAT is forgotten. For the time being consider the test a temporary hurdle you must leap in order to reach the ultimate goal.

For more information on the LSAT, or to register for the test, contact Law Services at (215) 968-1001 or at their website at www.lsac.org.

#### **Identifying Premises and Conclusions**

For LSAT purposes, a premise can be defined as:

"A fact, proposition, or statement from which a conclusion is made."

Premises support and explain the conclusion. Literally, the premises give the reasons why the conclusion should be accepted. To identify premises, ask yourself, "What reasons has the author used to persuade me? Why should I believe this argument? What evidence exists?"

A premise gives a reason why something should be believed.

A conclusion can be defined as:

"A statement or judgment that follows from one or more reasons."

Conclusions, as summary statements, are supposed to be drawn from and rest on the premises. To identify conclusions, ask yourself, "What is the author driving at? What does the author want me to believe? What point follows from the others?"

A conclusion is the point the author tries to prove by using another statement.

Because language is the test maker's weapon of choice, you must learn to recognize the words that indicate when a premise or conclusion is present. In expressing arguments, authors often use the following words or phrases to introduce premises and conclusions:

Premise Indicators
because
since
for
for example
for the reason that
in that
given that
as indicated by
due to
owing to
this can be seen from
we know this by

Conclusion Indicators
thus
therefore
hence
consequently
as a result
so
accordingly
clearly
must be that
shows that
conclude that
follows that
for this reason

Make sure to memorize these word lists.
Recognizing argument elements is critical!

Because there are so many variations in the English language, these lists cannot be comprehensive, but they do capture many of the premise and conclusion indicators used by LSAT authors. As for frequency of appearance, the top two words in each list are used more than any of the other words in the list.

Arguments can contain more than one premise and more than one conclusion.

When you are reading, always be aware of the presence of the words listed

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#### **A Commonly Used Construction**

Even within a single-speaker stimulus the test makers can raise alternate viewpoints. One of the most frequently used constructions is to raise a viewpoint at the beginning of the stimulus and then disagree with it immediately thereafter. This efficiently raises two opposing views in a very short paragraph. These stimuli are recognizable because they often begin with the phrase, "Some people claim..." or one of the many variations on this theme, including but not limited to the following:

```
"Some people propose..."

"Many people believe..."

"Some argue that..." or "Some people argue that..."

"Some critics claim..."

"Some critics maintain..."

"Some scientists believe..."
```

The structure of this opening sentence is remarkably consistent in form, and adheres to the following formula:

A *number* (some, many, etc.) of *people* (critics, students, teachers, legislators, vegetarians, psychologists etc.) *believe* (claim, propose, argue, etc.) that...

Of course, there are exceptions, as with these opening sentences from previous LSATs:

```
"Although some people claim..." (starts with "although")
"It has been claimed that..." (drops the number and people)
"Cigarette companies claim that..." (drops the number)
```

The author can also break up the idea, by inserting contextual information, as in the following example:

"Some critics of space exploration programs claim that..."

The use of this device to begin a stimulus almost always leads to the introduction of the opposing view, as in the following example:

Scientist: Some oil companies claim that deep sea drilling has now become a safe and effective means of extraction, but this view is clearly misguided. The scientist uses the "Some claim" device to introduce one opinion regarding deep sea drilling and then in the following sentence counters the idea with the view that turns out to be the scientist's main point ("this view is clearly misguided").

Given the frequency with which this construction appears at the beginning of stimuli, you should begin recognizing it now. We will again discuss this device in the Main Point section.

#### **Truth versus Validity**

So far, we have only identified the parts that are used to construct arguments. We have not made an analysis of the reasonableness or soundness of an argument. But, before moving on to argument analysis, you must be able to distinguish between two commonly confused concepts: validity and truth.

When we evaluate LSAT arguments, we are primarily concerned with validity. That is, what is the logical relationship of the pieces of the argument and how well do the premises, if accepted, prove the conclusion? We are less concerned with the absolute, real world truthfulness of either the premises or the conclusion. Some students will at first try to analyze every single LSAT statement on the basis of whether it is an absolutely true statement (does it happen as stated in the real world). For the most part, that is wasted effort. LSAT Logical Reasoning is primarily focused on whether the conclusion follows logically from a set of given premises. In many cases, the LSAT makers will let you work under a framework where the premises are simply accepted as factually accurate, and then you must focus solely on the method used to reach the conclusion. In a sense this could be called relative truthfulness—you are only concerned about whether the conclusion is true relative to the premises, not whether the conclusion is true in an absolute, real world sense. This is obviously a critical point, and one we will analyze later as we discuss different question types.

#### **Argument Analysis**

Once you have determined that an argument is present and you have identified the conclusion, you must determine if the argument is a good one or a bad one. This leads to the third Primary Objective:

### Primary Objective #3: If the stimulus contains an argument, determine whether the argument is strong or weak.

To determine the strength of the argument, consider the relationship between the premises and the conclusion—do the premises strongly suggest that the conclusion would be true? Does the conclusion feel like an inevitable result of the premises? Or does the conclusion seem to go beyond the scope of the

Logicians spend a great deal of time discussing validity and truth, even going so far as to create complex truth tables that analyze the validity of arguments. We are not concerned with such methods because they do not apply to the LSAT.

In logic, the terms "strong/ weak," "good/ bad," "valid/ invalid." and "sound/ unsound" are used to evaluate arguments. For our purposes, "strong," "good," "valid," and "sound" will be interchangeable and all terms refer to the logical structure of the argument. The same holds true for "weak." "bad." "invalid." and "unsound."