

## Readers' Reviews of the Big Fat Genius Guide to LSAT Logic Games

It is the best written, most concise, and most coherent book about the LSAT on the market. It reinforces the concepts taught, and I found it very engaging (which I cannot say about most LSAT books). I received a 173, but more importantly I scored a perfect games section. I tell everyone I can to get this book.

— *Matthew Pierce*

This book helped me a lot. I used to finish only 3 games, but Brian's method helped me make it through all of them. After reading this book, I took the LSAT in October (for the second time) and got a 175 (which was 9 points higher than my first score). I liked the way this book really broke down the questions by category and guided me through the process of studying. Games was by far my worst section before I began to use the Big Fat Genius Guide, but I got all of the questions in the games section correct on the day of the actual test. I would recommend the book to anyone; it was better than all of the other books I used.

— *M. Maloney*

The Big Fat Genius Guide to the logic games was the best \$40 I have ever spent. When I bought the book, I was running out of time on every practice logic games section I did, and on average getting about half of the questions wrong. After reading it and practicing with it, I was finishing on time and averaging one question wrong per game. I took the October LSAT, I answered every single question right, AND I finished an insane 12 minutes ahead of time!!! Thanks to this book, the answers in the logic games just pop out at me. Logic games were the one section I had trouble with before studying from this book, and on the actual test it was my best section! I am in love with this book.

— *Caryn Jones*

I cannot express how great a favor Brian Talbot has done for the luckless souls like myself who've gone through Stanley Kaplan courses and come out the other side convinced they were never going to get more than half of the Logic Games questions right. In my wildest dreams I never thought that my strongest section would be the games, but it was, and I scored a 168 on the LSAT. The efficacy and clarity of the method, and the depth to which it is thought through, are nothing short of remarkable. The book teaches a method of solving logic games based on simple principles applied efficiently and quickly. The prose style is friendly and reassuring. This method is utterly different from anything I'd learned before. You can really get a high score on the Logic Games section. Not just a "getting-by score" or a "better than I thought I'd do score," but a high score. For people like me, for whom the Logic Games were the most daunting section, this book is incredibly useful.

— *Michael Jonascu*

**Turn the page for more reader reviews**

## More Readers' Reviews of the Big Fat Genius Guide to LSAT Logic Games

This book is simply outstanding. It is clear in its explanations and concise in its methods. With this combination, it offers you a powerful weapon to score well on the games section. I improved 14 points, and I know that this book was key to that success.

— James Zerilli

I was absolutely “stuck” on the logic games section – it was what handicapped me the first time I took the LSAT, when I missed roughly half the logic games questions. I got every other prep book out there, and they only made my problem worse – infinite game types and setups to memorize, etc. By a few weeks before my second LSAT, I was at a point of extreme desperation. This book was akin to divine revelation – it’s concise and conversational, and the answer to all logic games hang-ups. Brian Talbot tells you that all logic games are basically THE SAME, and that they can all be solved using one straightforward method. I went from missing half the questions on logic games to missing only three – I improved my LSAT score to a 166, and I honestly owe almost all of that improvement to this book. If you can only buy one, get this one – no BS, it’s the best book out there.

— Laura Hague

I cannot say enough good things about this book. I studied for almost two months, and my scores jumped more than 15 points! When I took the exam, I was so relaxed that I flew through the questions. I started to worry that I was doing something wrong, but took Brian’s advice and relaxed. He said not to stress over the answers, they had to be right, because I knew how to take the exam and beat it. I did. I only missed two questions in the entire section, a personal best! I have recommended this book to everyone I know and will continue to do so!

— Lisa Epperly

The book is exceptional – Brian’s manner and conversation-like writing style are a great way to learn a difficult subject (perhaps the most challenging part of the LSAT). He analyzes a selection of games in sequence from easy to (very) difficult and, along the way, teaches you principles and methods that will help you attack games that you have never seen. He explains what you should have achieved at each stopping point and makes suggestions about what to do and what to not do. I found it a comfortable way to learn. If you trust the methods, they will work for you and you will come out of the test knowing you did great. I made quantum leaps in my skill with this book – it worked for me. If I had it to do over again, I’d use this book again. It’s worth every cent!

— Jeff Rutledge

THE  
**BIG FAT GENIUS**  
GUIDE TO LSAT LOGIC GAMES

BY BRIAN TALBOT



[WWW.CAMBRIDGELSAT.COM](http://WWW.CAMBRIDGELSAT.COM)

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## **Introduction**

My name is Brian Talbot, and I am going to teach you how to answer LSAT logic games questions faster and more accurately than you do now.

Before we get started, I'd like to address a couple of basic questions: first, what are LSAT logic games, and second, why should you listen to *me*?

Every LSAT consists of six sections. Two of these are Logical Reasoning – these sections consist of paragraphs followed by single questions, such as "What does the above argument assume?" or "Which of the following best supports the author's conclusion?" Another section is called Reading Comprehension. In this section you will have to read four longer passages (generally four or five paragraphs) and answer questions about the contents of each passage. There is also a section called **Analytical Reasoning**, where you will be presented with four odd situations, governed by seemingly arbitrary rules, and asked questions about how the situation may or may not be arranged, given the rules. This is the section I, and most LSAT teachers, call **logic games**. The LSAT also has an Experimental section, which will be the same format as one of the three sections I just described. In the Experimental section the makers of the LSAT test out new questions; you will not be told when you are working on the Experimental section. Finally, at the end of the test, you will be required to write a short Writing Sample.

This book is only about the Analytical Reasoning section (which I will call the "logic games" section from now on). If you've never studied for the LSAT before, you may wonder why I devote an entire book to this one section. For the vast majority of people, logic games are the single most difficult aspect of the LSAT. Yet this section can be made the most straightforward section of the test if you follow a series of fairly simple rules. The goal of this book is to teach you those rules.

Now to answer the second question: why should you listen to what I have to say about logic games?

I took the LSAT in June of 1994. On the first sample LSAT I ever took before I started studying, I got in the upper 150s, which I wasn't happy about. Logic games was the section that held me back. I studied smart and got a 176 on the actual test. I got my law degree from UC Berkeley in 1998, took and passed the California Bar in 1999, and then realized I liked teaching better than the law. In other words, I've been where you are now, I struggled and succeeded, and (except for the deciding not to practice part), I've been where you are going.

I've been teaching the LSAT since 1996, originally for a large national test preparation company. In January of 2001, I started Big Fat Genius, a company dedicated to teaching students *my* system for approaching the LSAT (and GMAT). In the time I've been teaching, I've seen more students than I can count, and I've worked individually with a large number of them. With Big Fat Genius I work almost exclusively as a one-on-one tutor. This has allowed me to study in a very focused way the types of problems students have on LSAT logic games, to work out strategies to deal with the games, and to see how students are able to use these strategies. I create all the lessons for my students, I develop all the techniques, and I get to see first-hand those techniques applied by students. This has allowed me to refine and hone my approach to the test.

What you have in your hands, then, is the result of seven years of constant improvement in my approach to logic games, and in my teaching. All of these techniques have been tested by me and by students. These techniques are designed not only to be as efficient and accurate as possible, but also to be learnable and apply-able by practically anyone – it does me no good to have a perfect system if no one but me can use it. This book is written with my teaching experiences in mind. I have done my best to make it readable, somewhat enjoyable, clear, and thorough.

My students often come to me after going through entire courses with other companies. Thus, I have been able to compare my system to those taught by every major test preparation company – Kaplan, Princeton Review, TestMasters, PowerScore. My system is significantly different from each of theirs; it is simpler, easier to learn, easier to apply, and more effective in more LSAT situations.

The final proof of the system is up to you. Read this book, apply what it says, and experience the score improvement.

## **How to Use This Book**

### **Before We Begin**

There are two things you need to do before you start using this book. First, you need to look at at least a couple of logic games. It will be much easier for you to understand what it is you are supposed to be learning if you have a bit of context. I expect that most of you have at least a little logic games experience – you wouldn't be buying a book just on logic games if you weren't a little bit worried about them, and you wouldn't be worried about them if you hadn't done them before.

For those of you who haven't seen an LSAT logic game before, go to [www.lsac.org](http://www.lsac.org) (not .com, which is a yachting club). You can download a sample LSAT there. At the time of this writing, this test is the same test given in June 2007 (minus the Experimental section); section 1 of the test is logic games. Work through that section; time yourself, but don't stop when your time is up. Timing yourself at this point is just to get a feeling for how long these things take. Now we all know what LSAT logic games are.

The other thing you need to do before you start using this book is to make sure that you have access to some LSATs to study from. This book contains twelve logic games, all of which come from actual, previously administered LSATs. But you will need more games to practice on, and you should only practice from real LSATs (if you have a book with logic games in it, but you don't know if they are actual real LSATs, check the beginning of the book where the copyright information is; if the book doesn't attribute its questions to LSAC, it doesn't contain real LSATs). You can purchase and print actual LSATs at **[www.cambridgelsat.com](http://www.cambridgelsat.com)**. I recommend getting at least ten LSATs to study from. You should always try to get the newest LSATs available (the higher the number of the LSAT, the newer it is – June 2008 is 54, for example), because the logic games have changed a bit over the years.

OK, those are the basics out of the way.

### **Using This Book**

Everyone who uses this book should use it in the same way. It doesn't matter how much LSAT experience you have. Begin at the beginning of the book and go through it word by word, chapter by chapter. Chapters will tell you if you should reread previous chapters, or if you should do work outside the book (and they will give you suggestions on what to do).

Some of you who have studied logic games extensively before this may want to skip around in the book, or jump to the more "advanced" techniques given at the end. *Don't do this.* As I said in the **Introduction**, the techniques in this book are on the cutting edge of LSAT thought. They are different from anything you are likely to have seen before; even the most basic things I teach, like diagramming games and writing down rules, are very different from the way other companies approach games. You may find that, while you are pretty good at the games now, the fundamental techniques I teach suddenly help you see the games in a whole new way and that you make a large improvement without using any of the "advanced" techniques. In fact, I will argue in the course of the book that the fundamental, "basic" techniques are much more crucial to your score than the "advanced" ones.

I give two possible schedules for how to use this book – one for people who have only two weeks to study logic games, one for people who have more than two weeks – in the chapter

entitled **Studying Timeline**. The two-week plan is very rushed, so don't use it if you can avoid it.

This book is written a little idiosyncratically. First, I write in a sort of "chatty" style. I like to ask you questions, as if you were really sitting with me studying. I do this for a very good reason. Human beings have been *talking* for tens of thousands of years. We have only been reading and writing for a couple thousand, and it has only been in the last century that anything like a majority of us have been literate. We have evolved as talkers, not as readers. Thus, we understand things better by talking them out than by reading them. I can't talk to each of you individually, but I *can* write a book that simulates the way we learn through dialogue. So, when I ask you a question in the text, I expect you to stop reading, think about it, and give your best answer. Then keep on reading and see how your answer compares to mine; if it isn't close, you haven't been understanding what you have been reading, so you might want to go back and reread it. Why do I do this? Because you think better by talking things through; answering questions allows you to activate those dialogue centers of your mind. Plus, it keeps you awake and engaged. Just to review, you should have answered that question ("Why do I do this?") when I asked it. However, the second answer I gave (about keeping you awake) wasn't in the text, so don't worry if you didn't give that as an answer.

Second, I like to underline things. If I underline something, it is something I think you *need* to remember. There are lots of things in this book you *should* remember, that you will *want* to remember. I won't underline all of them – the book would be 90% underlined. But I will underline the *most crucial* concepts, the ones that are most essential to remember. You should be taking notes as you read; write down anything that you consider important. But you must write down and remember the stuff I underline, although you should write it in your own words (that forces you to process it and understand it). If you start getting too lazy or tired to do that, take a break from reading for a while.

Third, I will occasionally put things in a box.

Here is an example of something in a box.

Often there will be quite a bit of text in the box, unlike here.

This is generally stuff I consider important or interesting, but not *necessary* for you to read. Sometimes it is an inspiring story, sometimes an interesting example, sometimes a little joke. I think you should read it, but I put it in the box so as not to interrupt the flow of the main text. In a few chapters I will use text in boxes to show alternate ways of answering the questions; in these chapters I will tell you that this is what I am going to do.

Fourth, I use **boldface** in a certain way. I use it for chapter and section titles. I also use it when I refer to chapter titles in the text; so if I mention **Game One**, or the **Advanced Techniques** chapter, I'll put them in bold. Finally, when I use a word for the first time in a chapter that is defined in the **Glossary**, I put that in bold (the first time only, otherwise it just gets obnoxious). So if you see a word in boldface and you don't know what it means, look it up in the **Glossary**.

Fifth, the numbering of the questions in each game might seem a little odd. For example, the first question in **Game Three** is number 6, but the last question in **Game Two** is number 12. There is a reason for this. Each of these games comes from a previously administered LSAT, but the games don't all come from the same LSATs. I have preserved the numbering that was used on the actual LSATs. So **Game Two** and **Game Three**, for

example, were both the second game on their respective LSATs, and so use the same question numbers.

One last note. For each game I go through, I reproduce the game, as it was on the actual LSAT, at the beginning of the chapter. Unfortunately, LSAC's policy on licensing LSAT questions prevents me from printing the questions, or their answers, more than once in the book. You may have to flip back to the beginning of the chapter periodically to see what a question or answer says. I do my best to reduce this necessity, but there's no way I can eliminate it (legally).

Let me recap: Answer when I ask questions. Take notes as you read, and especially note anything underlined. Stuff in boxes is side commentary. Boldfaced words are chapter or chapter section titles, or vocabulary from the **Glossary**. Got it? Good.

### **A Final Note Before You Begin**

Students generally want to spend the most time studying what scares them the most about a test. For the majority of LSAT students this is the logic games section. But the logic games section is only one quarter of your LSAT score. Spending more time on it than on Logical Reasoning or on Reading Comprehension may not be the best way to improve your LSAT score. How do you know how much time to devote to one section versus another? This involves balancing two considerations. First, how many questions are you missing in each section? You have to double this for Logical Reasoning, because there are two of these sections. Second, how easy will it be to improve your performance? For most people, logic games is easier to improve. This will also change as time goes on; as you get better and better at a section, you reach a point of diminishing returns, where you see less improvement for more time put in.

For example, a student who misses ten questions total on both Logical Reasoning sections (five per section), and ten questions on logic games, should study logic games more than Logical Reasoning. They are pretty good on Logical Reasoning – missing only five questions per section – so it will be harder (but not impossible) for them to improve that than to improve logic games.

Evaluate where you stand in LSAT performance, and what score you want to achieve. Then ask yourself how best to achieve that. Is spending more time on Logical Reasoning going to give you better score gains than spending more time on logic games or Reading Comprehension? Don't focus disproportionately on logic games just because they make you nervous.



## Studying Timeline

Here are two possible timelines for studying LSAT logic games. These are just for logic games, not the whole test. Both are guidelines, intended to give you a general idea of how you might spend your time; you should tailor your studying timeline to your needs and situation.

### Short Plan (Approximately Two Weeks)

This plan is for people who have only two weeks to study logic games. *I highly recommend devoting more than two weeks to studying logic games.* If you really feel that you have to take the LSAT *now*, and you have only two weeks, consider the difference going to a better law school will make in your life. If you consider that difference minimal, or not worth putting off applications for some period of time, go ahead with the test. If not, take a later LSAT.

If you have *exactly* two weeks before the LSAT, this plan is not quite for you. You need to spend at least the last three days before the test reviewing your strategies for the entire test, not just logic games. Adjust this plan accordingly – give yourself those three days at the end to review the whole test. Since you have embarked on a two-week crash course, I will assume you are willing to spend all 14 days of those two weeks studying.

#### Week One

The goal of this week is to learn the fundamental steps of logic games, and understand how to apply these steps to any game. No work you do in this week should be timed.

Our first goal is to learn the steps. Read all the chapters up to (but not including) **Intermediate Techniques**. Follow all instructions in the chapters, including those at the end under the heading "What Do I Do Next?" Make sure you apply all the techniques discussed in the **Studying Guide** when you study (not this chapter, but the one coming up about how to study). Read the chapters in order, but, since the chapters involve a lot of information and many of the chapters require you to work along with them, getting through them may take you a couple of days. Don't redo the games after you've read the chapters, as they tell you to, because you don't have the time. Make flash cards and memorize the steps as you go through this week (see the end of **The Fundamentals** for a quick how-to on flash cards). Spend the next two days practicing games from the "Recommended Games" list at the end of **Game Three**.

Our next goal is to learn how to apply these steps to any game, including the more difficult ones. Once you have memorized the steps (including how to approach every type of question), read the chapters starting with **Intermediate Techniques** and up to (but not including) **Advanced Techniques**. Follow all instructions in these chapters. This will take you a day or two. Week one is almost up. Spend the rest of the week working on games from the "Recommended Games" lists at the end of **Game Three** and **Game Eight**.

#### Week Two

The goal of this week is to get used to applying what you know about logic games under timed conditions.

Skip the **Advanced Techniques** chapter. Read **Game Nine** through **Game Twelve**; read the chapter on **Timing**. From this point forward you will time yourself on every logic game

you do. Follow the instructions in the "What Do I Do Next?" section at the end of the **Timing** chapter.

On the second to last day of week two, read the chapters **Before the Test** and **During the Test** and follow the instructions therein. This gives you one extra day to review your notes and make sure you have internalized everything you need to.

### **Normal Plan (At Least Four Weeks)**

This plan is for people who have more than two weeks to study. If you have less than four weeks, spend less time doing what I describe in "Week Three." The instructions in the "What Do I Do Next?" sections at the end of the chapters assume you are following this plan. This plan assumes that you spend four to five days per week, 2 hours per day, studying.

#### **Week One**

The goal of this week is to get comfortable with the fundamental skills. Read and work through the chapters up to (but not including) **Intermediate Techniques**. Follow all instructions in the chapters, including those at the end under the heading "What Do I Do Next?" Make sure you apply all the techniques discussed in the **Studying Guide** when you study (not this chapter, but the one coming up about how to study). Reading through the chapters may take you several days, especially if you work through each of **Game One** through **Three** on your own after reading their chapters. Make sure you give yourself a couple of days at the end of the week to practice; spend these days working on games from the "Recommended Games" list at the end of **Game Three**.

#### **Week Two**

The goal of this week is to cement your comfort with the fundamental skills and start building mastery of them.

If you don't yet feel like you understand the fundamentals, or don't have them memorized, feel free to continue working on games from the "Recommended Games" list at the end of **Game Three** for the first day or two of this week. Once you have reached the point where you do feel comfortable with them, read from **Intermediate Techniques** up to (but not including) **Advanced Technique** (so stop after **Game Eight**). Spend the rest of the week working on games from the "Recommended Games" lists at the end of **Game Three** and **Game Eight**. Make sure you use the studying techniques I talk about in the **Studying Guide**.

#### **Week Three, Week Four**

The goal of these weeks is to learn to apply what you know quickly and efficiently.

If you don't feel comfortable applying your skills to more complex games, continue to work on games untimed for a few days. Don't do this beyond midweek of week three, though. When you are ready, read **Advanced Techniques** through (and including) **Timing**. You may or may not want to apply the advanced techniques, but you should be aware of them. Follow the instructions in the "What Do I Do Next?" section of the **Timing** chapter.

Three or four days before the end of week four, read **Before the Test** and do what the chapter tells you. At some point in these days you should also read **During the Test**. You have now learned everything I have to teach you.



## Studying Guide

### The Why, What, How, When, and Where of Studying

Most of us have only a limited amount of LSAT studying time (or energy). Nevertheless, we want to get a good score. This means that we absolutely must maximize the little time that we have. Simply plugging through questions will not get you a good LSAT score, because it reinforces your bad habits as well as your good ones. This section provides you with a clear and proven effective system for studying for the LSAT logic games (although it can easily be generalized to the other sections of the test, as well). It won't be easy to use at first; sometimes it may seem overly burdensome. But, used correctly and consistently, it is the only way to *guarantee* improvements. Read this section, think about what it says, and then read it again and take notes. If you really want to improve your LSAT score, begin implementing these strategies today. You'll end up studying less than you might expect, yet learning more every time you study.

### Why Study?

The answer to this question is so obvious that you were probably tempted to skip this section. But an understanding of why you study underpins the what, how, when, and where.

You study because you want to get a good LSAT score. This is the only thing you should be concerned with when you study. If you ever wonder whether or not you are doing the right thing when you study, ask yourself, "Is this going to help me get a better LSAT score?" If it is, right on. If not, stop.

This may seem obvious, but most people don't act like this is their goal when they study. For example, one thing I commonly see people doing is studying when they are exhausted, such as immediately after getting home from work. Now, is studying when you can't focus on what you are doing helping you get better at the LSAT? Of course not, because you are going to *not* do what you should, being too tired to practice new skills.

Most people act like their goal is to do a lot of practice games before they get to the LSAT. That is, their entire studying plan is to do game after game, without really thinking about what they can *learn* from each game. Doing a lot of games can be helpful, but it is only helpful if it improves your skills. If you continue to make the same mistakes over and over, doing those games is doing nothing but building bad habits. The point of doing practice games is to build up the skills that you need for the LSAT. Every practice question is a chance to practice at least one useful LSAT skill; if you don't use the right skills on the question, you have wasted your opportunity. If you don't learn from the question, and figure out how you should do similar questions in the future, you cannot improve. When we practice, we want to make sure we are practicing skills that we need to learn; after we practice, we want to review what we have done to determine what we now need to work on.

Every time you sit down to study, ask yourself, "What is my goal? What can I do now to improve my LSAT skills?"

Here's a little story about how important it is to know your goals when you study.

Once upon a time, back when I briefly practiced law, I went to the UCLA law library to do some research. I was sitting outside the library thinking about such and such and I overheard a conversation between two 1<sup>st</sup> year law students (this was during the middle of

their second quarter of school).

One student was complaining to another about her contracts teacher. Every week, she said, he assigned them tons of reading. She could barely get all of it done and briefed (which is a way law students often take notes on the cases that they read) before class, and it consumed more time than any of her other classes. Yet, every week, the teacher never once talked about any of the reading he had assigned. This upset her quite a bit.

This, clearly, was a student who didn't know what her goals were. I could see three possible goals she might have: 1) learn the material, 2) impress the teacher, or 3) do well in the class. If she wanted to accomplish 1), then she should do exactly what she was doing and stop complaining, because she was doing what she wanted to do and it didn't matter what the teacher asked or didn't ask. If she wanted to do 2), she should stop bothering to read the material, since the teacher clearly didn't care whether the students read it or not. Likewise, if she wanted to do 3), she probably didn't have to read *all* the material either, because in my experience most cases you are assigned to read in law school are not relevant to the final exam. She should have been well aware of that, having already been through one series of final exams. If the cases *were* necessary to do well in the class, though, she should also stop complaining, because, again, she was working towards her goal.

The reason she was so unhappy was either because she didn't realize that she was doing exactly what she wanted to do, or because she was doing work which was irrelevant to her goals. If you are aware of your goals, necessary work isn't always pleasant, but it is easier to accept it and be satisfied that you are doing it; as far as unnecessary work goes, you just shouldn't bother doing it.

### What to Study?

Your goal in studying is to improve skills. Before you can do this, you need to determine what the skills are you are trying to improve.

Every time you sit down to study the first thing you should do is decide what it is you are going to work on. Never study without first identifying the specific skills or goals you will work on in that session.

### Making a "long list"

As you work through each chapter in this book, take notes on what you learn. Everything underlined should definitely go in your notes, but don't limit yourself just to that. Your notes should include enough information that you can understand them without having to go back to the chapter itself; don't just jot down a phrase from the book, but rather explain the concept to yourself. Each chapter will briefly summarize itself at the end; use this to check your notes and make sure you covered everything. This summary won't include every single concept, just the key ones, and it won't *explain* the concepts to you, which your notes should (otherwise you can't use the concepts they contain). Don't be lazy and wait to take notes until the end of the chapter; the act of taking notes forces you to think about what you are reading while you are reading it, which will cause you to understand things better.

After working through a chapter in this book, you should review the notes you took and the questions you did during that chapter. You should do this no more than 24 hours after finishing the chapter. However, don't start reviewing immediately after finishing; give

yourself at least an hour of rest after the session before you start reviewing. Reviewing means reading through your notes and making sure you understand them; add anything you need to clarify what you wrote.

Again, write your notes with the intent that, when you review them later, you will understand exactly what they mean and be able to implement what they say without a lot of head-scratching.

After you write everything down, you may want to type it up and organize it in some way that makes sense to you. Organizing this stuff is helpful in that it forces you to think further about how everything fits together, rather than viewing every little tidbit as a completely separate idea to be memorized on its own. Use an organizational scheme that makes sense to you; you may want to put all the techniques about a certain type of question together, or group techniques by aspect of the test (timing, eliminating answers, etc.).

These notes are your **long list**. The long list will contain *everything* that you want to know for the LSAT.

### **Prioritize: make a "short list"**

As you learn more and more, your list of things you want to learn is going to get rather long. You won't be able to learn everything on it at once. You will also need a shorter list of things you want to focus on *right now*. This is the **short list**.

Typically, your short list will contain issues of procedure and technique, such as a list of steps to follow for certain question types. The short list should be easy to read and understand at a glance. It should only have a few points on it, just the number of things you can focus on learning in one sitting (generally 3-5). Put this short list right next to you when you study, so you can refer to it easily.

The point of the short list is that you will refer to it constantly as you work through practice questions. The point of doing practice questions is to practice new skills; if you don't actually use your new skills as you practice, you won't learn them. The short list reminds you what these skills are and how to use them. By referring to it constantly (at least before every question) you will keep these skills at the forefront of your mind, which helps to guarantee that each question brings you closer to mastering and habituating them.

### **Making a short list – be specific**

This is crucial. The notes you take are meant to help you. They must give you instructions you can implement without too much thought. Your notes, both the long and short lists, should contain ideas that you can look at in the middle of doing a problem, read, understand, and implement immediately.

#### **Bad notes example**

- Be careful - don't make stupid mistakes
- Learn question types!

The above notes (either as a short list or a piece of a long list) give important goals. However, there are no instructions on how to actually accomplish those goals. These notes are the equivalent of writing yourself a note to "Get answers right!" They are useless.

### Good notes example

- Be careful:
  - Read every word in a sentence
  - Write down any information given
  - If I need to test something out, make a new diagram
  - Go through all the rules
- Learn question types:
  - On "Can be true" questions, test each answer and see if it can be true
  - On "Must be true" questions...
  - [and so forth]

Notice that the good list expands on the goals of the bad list in very concrete ways. Every time the list gives a more complicated concept, it breaks it down into smaller steps. These notes give thought processes that can be used on the test. These notes answer the question "What should I do in a given situation?"

### How to Study

Now that we've talked a bit about how to figure out *what* to study, let's talk about *how* to study it. When you first start studying you will be learning new skills. You can't worry about how fast you are at this stage. You must *learn* a skill before you can do it quickly, and if you try to get fast too early you will become sloppy. In this section I will talk only about studying without timing yourself.

Studying is actually *harder* than taking the test – it requires more effort because you are learning new skills, whereas taking the test is just following a path you've already set out for yourself. Taking the LSAT is just a matter of showing up; all the real work is done beforehand, when you study. The right approach to studying will make the real LSAT a breeze (relatively speaking).

Studying consists of three stages. You must do each of these stages every single time you sit down to study.

#### Stage 1: Preparing – what will you practice?

As discussed above, before you can learn a skill, you need to know what the skill is you are trying to learn. The first step in studying is reviewing your long list and putting together your short list.

You will be creating your long list as you read through this book; your short list will either be created from scratch when you finish a new chapter or will be based on material you've been working on already.

Once you have a short list, you must spend some time reviewing it before you do any problems. Make sure you know what each item on the short list means, and how to go about implementing it.

Before you go on to stage 2, visualize doing a game or two. What this means is closing your eyes and imagining working through a game. This may sound bizarre, but it is extremely useful. Walk yourself, in your mind, through all the things you should be thinking about when approaching a game, from the setup stage to answering questions. Think about the skills to employ, the tricks to watch out for, and the possible mistakes you might make. Why is this useful? When you are actually doing a game, you typically focus on the game

itself, which means you aren't thinking so much about the skills you are trying to practice. This means that it will be hard to use these skills. By visualizing, you get a chance to practice using the skills without distractions; this gives you an opportunity to practice (rehearse) the skills themselves before you have to use them. If you do this correctly, when you actually do problems you will simply be following a plan you have already laid out for yourself. Visualization is a technique useful in any situation where you have to employ a complex skill under pressure, from cooking to archery, and will really help your LSAT practice. Always visualize using your new skills before you do *any* set of questions.

### Stage 2: Practicing

Once you have identified what you want to work on, you must actually work on it. This means you must do practice questions.

The point of doing practice questions is to practice your new skills so that they can become habits. Habits are things you do without having to think about them much. If you develop good habits, when you take the actual LSAT you'll be able to focus on doing the questions, not on trying to remember *how* to do them.

As you do each question, make sure you do everything *exactly* the way you are supposed to. Constantly refer to your short list to make sure you are working on the skills identified there. This is *absolutely crucial* because it leads to forming proper habits, so let's repeat. When you are doing practice questions, you must make sure that you are following the correct procedure; that is, that you are doing the right steps in the right order, without skipping steps or doing anything extra. This is the only way to form habits. Start this from the very beginning. The more you do this in practicing, the better you will do on the actual test.

If you come across something you have done before, but forget how to do it, stop and look it up in your notes. It is better to take the time to do this and be slow than it is to do the question the wrong way. Don't worry about memorizing things yet; you'll end up memorizing most skills through use (I'll note in the chapters where you should take extra, non-practice, time to memorize things).

Every time you skip a step, get sloppy, or allow yourself to lose concentration, you are reinforcing bad habits which will cost you points on the test. Conversely, every time you do the right thing on a question you are reinforcing good habits which will help you get questions right on the test. People fall back on their habits when tired or under pressure. If you have the right habits, you will do the right thing when things get tough on the test. Follow all the steps you have learned, even when you feel that they are unnecessary, or that a question is easy without them. Practicing good habits even on easy questions means that you will have these habits on hard questions, which will make them easier.

Initially, do only one game at a time. At this point don't worry about how long each game takes you. You only do one game at a time because there is a chance that you will do some questions the wrong way. If you only do a few questions, you can catch your mistakes before you repeat them and make them a habit. In addition, doing only a few questions allows you to devote all your attention to the questions you do; do too many games in a row and you will get tired and sloppy, creating or reinforcing bad habits. Once you finish a game, stop and take a break. You may do more games that day, so don't worry that you'll only be doing one game a day, but you have to do step 3 before you do any more questions (and then step 1 again, as well).

Remember, no one cares about how many games you did when you practiced for the LSAT. No one will ever know, unless you tell them, and this fact will never make a difference in getting into law school. What matters is your actual LSAT score. This studying method puts a lot of emphasis on thinking about questions before and after you practice them, not on cranking through as many questions as possible. This may be frustrating at first, but the only way to improve what you do (and eventually improve your LSAT score) is to know what you are supposed to do and make sure you do it.

### Stage 3: Review

After you have finished your game you must check your work. This doesn't just mean seeing if you got the answers right; this means checking your work to see if you used the right approach to each question. No one cares how many questions you get right when you *practice*; all that matters is how you do on the LSAT. If you get questions right, but use skills that won't work on the real LSAT, then you aren't improving. When you review questions, you are checking to see if you used the skills you will need for the LSAT.

In the beginning, review questions you got right as well as those you got wrong. See if you did everything you were supposed to do, or if you did work that you shouldn't have. If you did get questions wrong, try to reconstruct why, and ask yourself what you could have done to avoid your mistakes. Try to see how the general principles in this book apply to the games you do; don't try to construct overly specific ideas that will only apply to games exactly like the one you just worked through.

If you find you are making mistakes, look back through this book to find where I talk about similar issues. Here you will find concepts and skills you will want to use in the future to avoid these mistakes. Add these to your notes. Notice patterns of mistakes you make. Think about how you can avoid making these mistakes in the future. Don't just tell yourself, "Don't do this," but think about what you should *do* to avoid that mistake. For example, you might say to yourself, "Don't read too fast!" A better note would be, "Read carefully by stopping after every sentence and writing all the information down." Notice that the second note is something you can do to solve your problem, rather than simply an instruction not to have a problem.

If an issue comes up often enough, put the solution on your short list, or (if it's already there) highlight it to make sure that you work harder on it in the future. Anything you learn about the test or yourself through this review should be added to your notes (at least to your long list).

You should also notice what you did well. People are usually good at beating themselves up, but don't notice what they are improving at. Spend at least a few minutes every time you study thinking about what you are getting better at – what you do better now than you did before. There are two reasons for this. One, it will make you feel good, which will help you continue to work hard. Two, you will eventually move some things off your short list as you get good at them.

One quick note: don't laugh off stupid or sloppy mistakes. Making careless errors is the result of improper technique. People who miss their score goals on tests often do so not because they didn't understand the material, but because they deviate from what they have learned – that is, they get sloppy under the pressure of the test. The techniques in this book are designed to make it very hard to make dumb mistakes; learn and use them. If you keep making dumb mistakes, figure out what you are *not* doing. If you don't learn how to avoid sloppy mistakes now, then you will be more likely to make them on the test when

you are under more pressure. It is crucial that you build good habits now, when you are studying, so that they will be present on the actual test. If you make sloppy mistakes you must force yourself to stick to the techniques you have learned and slow down.

This is why you only do one game at a time, so you can constantly assess yourself and re-prioritize. Doing 100 questions in a row does no good if they are all done wrong. In fact, it will probably hurt you more than anything else, since you will have built up some really bad habits. Stopping frequently and checking your work allows you to nip problems in the bud. It also keeps you from dying of overwork.

### **Return to Stage 1: Set new goals and start over**

After having done a game you will know more about what you should be working on. You may continue on the same types of problems, or move on to something else. You may have changed your short list of things to focus on. You may be feeling confident about a lot of things which troubled you up to then.

Your self-assessment, performed during stage 3, should help you to change your short list periodically. If you feel that you have reached a point where you automatically use one of the skills on your short list, take it off the list. Add new high-priority skills to the short list as you master old ones.

Take a break. Think about whether or not you have the energy and focus to do more work this day. Maybe you need a significant, 20 minute to several hour break, maybe you can start right up, or maybe you need to stop for the day. If you are going to study more this session, take some time to think about what the questions you have done have shown you, and what you should be working on. Then repeat the process: review or remake your short list, visualize using the new skills you want to learn, do another game, and review it.

All studying should consist of these three steps – preparing by making or reviewing your short list, doing some questions to practice your skills, and assessing your progress. You cannot eliminate any of these steps if you want to study efficiently.

### **Studying under timed conditions**

Studying under timed conditions is a lot like normal studying, which I just described. I'll let you know later in this book when I think you should start timing yourself. When you do, you will still go through steps 1, 2, and 3 as I describe above. However, in step 2, you will generally do whole test sections – four games – in 35 minutes, or sometimes do just one game, allowing 8 minutes to do it. Your goal is to answer as many questions as possible in the time given. Don't allow yourself to go over time; stop doing questions when your time is up. You should be practicing everything you normally practice, but paying extra attention to watching if you do *extra* stuff you shouldn't be. The key to speed is to eliminate excess work (anything I don't tell you to do in this book), not to rush through necessary work.

When you review the game (step 3), you can do all the extra stuff you didn't do in your 35 or 8 minutes – answer questions you didn't get to, try alternate diagrams for the game, try to make deductions you missed. The goal during your timed practice is to simulate the LSAT, which means not doing anything you haven't already mastered. When you review you can think about what else you would like to learn and practice.

### Take frequent breaks

It is important to be able to concentrate when you study. Remember, you are trying to build habits for the test. Being sloppy and unfocused is a bad habit. When you start to feel fuzzy, take a break. The best kind of break involves some minor exercise – a little walking, for example. If you allow yourself to recharge often you will get more out of the time you spend studying.

Take a significant break every half hour or 45 minutes, even if you feel fine. This break should be at least a few minutes long. A few minutes of break time is very helpful. Of course, you won't be taking breaks this long when you take the LSAT, but remember, studying is actually *harder* than taking the test. Thus, you need more energy when you study, which means you need to take more and longer breaks.

You should also take shorter breaks more frequently; take a 30 second to 2 minute break every 8 minutes. This is the same frequency at which you should take breaks during the actual test (you'll take a break after finishing each game); thus, taking these breaks is a way of practicing for the LSAT. These breaks help maintain concentration at peak levels, break up the tedium of questions, allow your blood to move more actively, and combat eye strain. During this break you should breathe deeply while not moving, move your head and shoulders to stimulate blood flow, focus away from your book or computer (preferably at something far away), and adjust the way you sit to be more comfortable.

### When to Study?

The goal of studying is to learn. You should only study when you are capable of learning.

Following the three-stage study process requires that you be alert, focused, and somewhat energetic. Do not study when you don't feel alert, focused, and somewhat energetic. Studying when tired or distracted leads to studying wrong. Studying wrong leads either to wasted time or to the learning of bad habits, which leads to bad test scores.

### What time of day is best for studying?

If you work, you should probably study before work on a regular basis. If you can't, then you should *not* study immediately after work. Allow yourself an hour or two of rest and have a light meal, and then study.

Don't watch TV or listen to music when studying.

In addition, the times you study should reflect your natural cycles of attention. Every human body follows a 25 hour cycle called the *circadian rhythm*. Although this rhythm is not exactly as long as our 24 hour day, it is reset every morning by exposure to bright light, usually sunlight. The circadian rhythm causes humans to experience two major alert and two major sleepy phases. The sleepy phases are (generally) from 2 to 7 am and 1 to 5 pm. The alert phases are roughly 9 to 11 am and 7 to 9 pm. Thus, try to avoid studying between 1 and 5 pm.

In addition to the circadian rhythms, humans also have natural *ultradian rhythms*. These rhythms are a cycle that re-occurs through the day; we experience approximately 90 to 120 minutes of alertness, followed by 20 minutes of "recovery," during which thinking and concentration are more difficult. Because of this, you should not expect to be able to study for more than 90 minutes without a significant break (remember, you should be taking



*short* breaks periodically – every 8 minutes, or at the end of every game). This significant break should be 20 minutes long; during these 20 minutes you should not study or think about the test at all.

Because the exact length and effects of these two cycles can vary from person to person, you should spend some time trying to figure out when your two main circadian sleepy times are, as well as when your 20 minute ultradian down times occur. In addition, don't consider these hard and fast rules; in general, try not to study during these down times, but sometimes it may be unavoidable.

It is OK to break up your studying so that you do different stages of studying at separate parts of the day. For example, you might do practice questions in the morning (stage 2), and then review them and prepare for the next set (stages 1 and 3) in the evening. This is fine, as long as you always precede practice questions with stage 1, and follow it with stage 3. If you do break up your study times, make sure you do some visualization right before doing practice questions.

One note: the practice stage of studying (stage 2) requires more concentration than the other stages. Try to time your studying so that you are doing this when most focused. If you have to do one stage in the morning and the rest in the evening, do most of your practice questions in the morning.

You won't be able to follow these guidelines all the time – no one lives an ideal LSAT studying life. But do your best to make your LSAT studying productive. If you never have time to study when you are alert, you aren't going to improve much. If this is the case, you need to reconsider your priorities.

### **How often should I study?**

You should study at least three or four times a week, but generally not more than five. It is more important to study often than it is to study for a long time each session. Preparing for the LSAT is all about building good habits. Habits can only be built by consistent repetition, over the course of days and weeks; it can't be built by cramming. This is for two reasons: first, your ability to acquire the habit diminishes as you do something for consecutive hours (you need to recharge); second, if you wait between studying sessions, you begin to lose your habit.

Sports, or other difficult physical activities, are good analogues to preparing for the LSAT. If you want to improve your free throws, your golf swing, or the amount you can bench press, you have to practice consistently. If you play golf once a month, you will get better only slowly, if at all. This is because your muscles build up in certain ways when you use them, so that next time you use them in that way they function more efficiently; if too much time passes between these types of use they break back down, and any gains you made are lost again.

At the same time, practicing too often is bad for you as well. Weightlifting is a great example. If you go into the gym every day and work out your biceps, let's say, you'll make less progress than someone who went in half as much. This is because you aren't giving your muscles time to recuperate and build up in between uses.

Your brain is like a lumpy gray muscle. If you use it in the same way consistently, certain neural pathways get reinforced, which makes it easier to use these pathways in the future; with time and disuse, these paths return to normal. At the same time, if you overwork your brain, it won't respond as well until it gets a chance to rest.

If you want to be good at the LSAT, you have to train properly – practice consistently, don't over-train, and always use the right form.

Each of these studying sessions should be 1 1/2 to 2 hours long (although you can break it up over the course of your day). Studying for much less than an hour is a waste. You need at least 20 minutes to prepare to do questions (reviewing notes and making a list of what to practice), at least 20 minutes to do questions, and at least 20-30 minutes to review the questions. If you study for less than an hour you will have to eliminate one of these steps. This means you won't learn anything from that time.

Studying for more than a few hours in a row means you are going to be studying when you are very tired. No one can focus properly at a high level for this long. If you need to study for several hours in a day, take *at least* a 20 minute break every 1 to 1 1/2 hours.

Studying consistently is much more important and useful than studying a lot. If you study 1 1/2 hours five times a week (total = 7 1/2 hours per week) you will learn more than studying 8 hours a day every weekend (total = 16 hours per week). Here, less than half the studying will result in more learning.<sup>1</sup> Don't put off your studying until the weekend; you'll learn less in a weekend than you would in a week (even studying the same total amount of time) and you'll lose a lot of what you learned by the next weekend. Anyone can fit studying into their weekly schedule. You may have to make some sacrifices, but a month or two months of unhappiness is better than spending three years at an inadequate school, followed by several years in a lower-paying job.

In summary, study consistently. Only study for as long as you can focus. Make sure that you give yourself enough time to preview what you will practice, do questions, and review the questions you did every time you study.

### **Where to Study?**

Study someplace where you can focus.

Coffeeshouses aren't very good places to study. No one ever gets much done in a coffeeshouse. There are too many other people, some or all of whom you will be constantly aware of. There are too many noises. That said, they are great places to look and feel like you are studying while really just amusing yourself. Of course, you may not be able to avoid studying in coffeeshouses, especially if your actual house is even less conducive. It's not impossible to learn at a coffeeshouse, so if you have no other choice, don't give up on the LSAT.

If you have a roommate, spouse, or children, your living room is also a terrible place to study. If you have no one at home, but own a TV, stereo, or computer, the living room is still bad. Never, ever, ever study while watching TV.

The best place to study is someplace quiet outside your home (but not so far as to discourage you from going there). Having to travel is useful psychologically, to focus you and keep you from stopping too soon – since you had to drive or walk to get there, it makes

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<sup>1</sup> Roughly speaking; it's very difficult to quantify learning, and people vary, etc. etc. The point is, studying less, but consistently, is much more effective than studying more, but with large gaps between study sessions.

that travel time seem wasted if you go home early. I prefer studying in libraries (as long as I stay away from the fiction section).

### **Summary**

The goal of studying is to improve your LSAT score. If, when studying, you do anything that doesn't, directly or indirectly, help you improve your score, you are wasting your time. You should study at least three times per week, and at most five. Learning new skills takes consistent practice. If you wait too long between study sessions you lose whatever skills you built up. If you study too much, though, you might burn yourself out. Study someplace you can concentrate, where distractions will be minimal.

Before you do practice questions, you should put together a long list and a short list. A long list contains every skill and concept you'll ever want to learn for the LSAT. You create your long list as you work through this book, and as you pick up new pieces of knowledge while practicing. A short list contains the skills and information you want to practice right now. You can't learn everything on your long list at one time, so you prioritize and put your high priorities on your short list. This list will change as you learn the skills on it; you'll take off the skills you have mastered, and put new ones on.

Immediately before doing practice questions, visualize the processes you want to practice. When visualizing you should imagine that you are doing a game or games, and walk yourself through the process you want to follow. You should visualize before doing any set of practice games. Visualizing helps focus you on what you are trying to practice, so that when you actually do games you do them properly.

The point of practicing is to learn habits, and you can only learn habits by repeating a process over and over. When you do the actual LSAT, you will tend to do questions in whatever way is habitual for you. If your habits are good, you'll do well. Build habits by always doing the questions the right way – following the proper steps, leaving nothing out – no matter how easy or hard the question is. Look at your short list constantly as you do practice questions, at least before every new question. Start out by doing practice questions in small sets – one game at a time.

After you finish a set of practice questions, review what you did and think about what you did well and what you should do differently in the future. Don't worry about getting the right answer or not; worry about following the proper procedure. Remember to be aware of what you are doing well, and give yourself positive reinforcement. Use this review to change your short list and guide your future practice.

You should take breaks whenever you need to, and at least every 10 minutes. This keeps you alert and focused when studying, and also simulates what you'll do during the real LSAT, thus building good test-taking habits.

To summarize the summary – before you do questions, figure out what you want to learn and make sure you understand it. As you practice, constantly focus on practicing what you are trying to learn. After you practice, figure out what you have learned and what you need to learn in the future. Use this information and start the process over again. This will help to ensure that your studying time is always concentrated on changing your logic games habits for the better.

### **What Do I Do Next?**

Do you have the energy to keep learning? If not, take a break or stop for the day. Otherwise, continue.

Now that you've learned how to study, read the next chapter – **How to Take the LSAT Logic Games Section** – taking notes for your long list as you go. Don't forget to take breaks as needed. Pretty soon you'll be doing practice games, putting everything from this chapter into effect. I hope you're as excited as I am.

## **How to Take the LSAT Logic Games Section**

Let's be honest: the LSAT logic games are hard. Let's take a second to be upset about this... Darn it! OK, feel better? That done, let's see what we have to do to get a good score.

The LSAT logic games are hard for two reasons. First, the test just *is* hard – there is a certain amount of hardness built right into the test that is basically unavoidable. Second, the way most people take the test makes it even harder. We can't avoid the built-in hardness unless we skip the test, so we have to prepare for it and know how to deal with it. At the same time, we clearly don't want to make the test any more difficult than it has to be, so we need to know how *not* to do the stuff that makes it harder.

### **Built-in Difficulty**

There are several aspects to logic games that make them inherently difficult:

1. You have to know logic
2. The games, questions, and answers are worded confusingly
3. There is a lot to think about at once
4. There are a lot of questions
5. There isn't a lot of time

Let's go through these issues one by one and discuss why they make the test tough and what we are going to do to overcome them. I'll develop all of these ideas in more detail later in this chapter, but for now I want to get us thinking about how we are going to make the test easier.

#### **1. You have to know logic**

What are we going to do about this? Well, we can't avoid it – we'll have to learn the logic we need to know. That's part of what this book is for, to teach you all the logical concepts and skills you'll need to succeed on the LSAT logic games. It's not so hard – what makes the test difficult is not the logic, but the way in which it is presented to you.

#### **2. The games, questions, and answers are worded confusingly**

You may actually know the logic involved in a question, but if you can't figure out what the question is asking you to do there is no way you'll do it. The easiest way to understand questions is to first know what types of questions will be on the test. There is a limited number of types of questions they can ask, and every question of a given type is answered in the same way. It's easier to identify an oddly worded question as being a certain type than it is to figure out what it means from scratch. On the test, once we figure out which of the question types we are presented with, we know exactly how to go about answering it. This eliminates a certain amount of difficulty; we no longer have to think about *how* to answer a question, we just have to answer it.

In addition, we are going to need to read slowly and carefully. It's easy to miss a "not" or "exactly" or "at least," and thereby to miss the question. We need to take in and understand what we read, and this requires reading carefully.

#### **3. There is a lot to think about at once**

Games involve a lot of information – not just the information the games give you in the form of rules, but also the steps you need to remember to go through for the questions. If

you try to manage all this information in your head at one time, you'll get confused and make mistakes. You'll also get tired, which will slow you down and make you more prone to make mistakes. We deal with the information the game gives us by writing it down so that we don't have to remember it. The more we rely on writing things down, the less we need to think. The less we think, the less open we leave ourselves to making mistakes and the less tired we get. In addition, we need not just to memorize all the steps for doing questions and so forth, we need to make these steps into habits. Habits are things we do without thinking. We can form habits only by studying properly.

#### **4. There are a lot of questions**

What is so difficult about this? Well, we will eventually get tired. When we're tired the questions will be a lot more difficult. Also, even if we don't get tired, we may not have enough time to answer all the questions.

We don't want to use any more mental energy on a question that we have to. One way to avoid using too much energy is to write everything down, as I said above. We also need an approach to the test that is simple and doesn't require too much thought. That way, when we get tired (and we will), we can still stick to our system and do well. As we go through my approach to games you will see that I have tried to make it as methodical and memorizable as possible; I've done my best to eliminate unnecessary details and useless information from the approach. A simple, memorizable system is one that can be applied even when you are tired and not thinking as clearly as you normally do. It is also crucial to have techniques to help you maintain focus and regain it when it has been lost. The best technique for this is taking breaks during the test. We'll talk more about that later.

Because we may not have time to do all the questions, we need to have a system that maximizes the number of questions we do. In part we do this by speeding up on each question – having a simple and efficient approach. But we also need to do the questions in the right order. We want to do the easiest and fastest questions first, because we can do more of these in less time. I'll teach you a quick and easily memorized way to figure out what order to do the questions in on every game.

#### **5. There isn't a lot of time**

Given the time limits of the test, it is crucial that you maintain the proper pace and don't waste any time. On the logic games section you have 35 minutes to do four games. You are capable of doing every game within these limits. You may not answer every single question on every game, but we are going to get pretty close. However, you don't have a lot of *extra* time – if you spend time doing stuff that doesn't help you answer questions, that is going to cost you points.

It is amazing how much time students waste on the test. Yet students generally don't think they are wasting time – they think that the steps they spend the most time on during the test are helping them, when an objective observer would realize that these steps don't get them points in proportion to the time they take. For example, students often want to figure out as much as possible about a game before they look at the questions. This can be helpful; it can save you a little bit of time on the questions. But I often see students spending *several minutes* doing this. There is no way that this is worth so much time. You only have about 8 minutes per game (35 divided by four). You probably spend at least a minute, and more like two, understanding the structure of the game and the rules that are given to you. Spending an additional 3 minutes figuring out how the rules can be combined, and what may or may not happen in the game, gives you only 3 or 4 minutes to answer the questions. That's not enough.

Given that you don't have enough time, you can't afford to waste it. The key to speed on the LSAT is *not* rushing through the questions. There is certain work that has to be done slowly and carefully. The key to speed is avoiding doing anything that doesn't *have* to be done. We're going to figure out just what you have to do to get a great score, and we won't do anything else.

### **What Makes the Test Harder Than it Has to Be?**

Here is a list of the most common ways test-takers hurt themselves on the LSAT:

1. Multitasking
2. Not knowing what to do
3. Not doing what they need to do
4. Working through fatigue
5. Worrying and/or changing your strategy

#### **1. Multitasking**

Multitasking is doing more than one thing at the same time. It is inevitable and not always bad in the real world. For example, I am pretty adept at walking and chewing gum, or even walking and talking at the same time. Neither of the tasks in these pairs uses the same skills or the same part of the brain; only one of the two requires much (or any) concentration. Now imagine you had to do two tasks simultaneously, both of which required the same mental resources. Could you recite poetry while reading the newspaper? Maybe, but only if the poetry were gobbledygook, or you didn't really pay attention to what you were reading. The same problem arises when you do two tasks that both require concentration. You can walk and talk, but could you walk on slippery ice while closing an important business deal?

On the LSAT logic games section, every task uses the same part of the brain – they are all logic games – and every task requires a decent amount of concentration. Doing more than one task at a time on logic games means that you'll do each task slower and less accurately than you would normally. Multitasking doesn't *save* you time, it slows you down. Multitasking is a great LSAT sin, and it comes up in a variety of ways, such as thinking about what you are going to do for the next step in a question before you've finished the step you are on, or in trying to combine a rule with other rules while you are still writing it down.

#### **2. Not knowing what to do**

It's perfectly OK to look at a question and not know what the answer is. Finding the answer takes time and working through a process – you don't get answers just by looking. However, given that there are a relatively small number of question types for the logic games section, and each type is always answered in the same way, there is no excuse for not knowing the next step to take at any given stage of the section.

This doesn't mean that you have to be able to look at a game and know exactly how everything fits together. It doesn't mean that you have to look at a question and know what the answer is. You are going to have to work through a system; you are going to have to figure things out slowly and carefully. *But*, you should know exactly how to do that, and you will, because I'm going to teach you.

<p>As an LSAT tutor, students often ask me for help with games that they can't figure out. Typically, these are really challenging games (otherwise they wouldn't need help with them). I can't count the times a student said, "What's the answer to this question?" or</p>
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"What's going on in this game?" and I said (after looking at it for a second or two), "I have no idea, it looks really tough."

So what do I do in those circumstances? Tell the student sorry and refund their money? Of course not. Instead, we go through the game or question step by step; we read the first rule or the first answer and figure out what we have to do with that. Then we go to the next one, and figure out what we have to do with it. By the time we get to the last step we have answered the question or we understand the game well enough to start working on the questions, and it hasn't taken us that much time, either. This happens all the time; when I first started tutoring, it scared me silly, because I didn't have enough experience to trust my methodology. After a while, though, I started to take these almost miraculous solutions to complex questions, which just emerge from doing the work, as normal.

What's the lesson here? Even the best test-taker (me, by the way) can't look at a hard question or game and instantly figure it out. But, *any* good LSAT-taker knows all the steps to go through, *and* they can tell them to you at a moment's notice.

### **3. Not doing what you need to do**

There are certain steps that have to be taken in order to answer a question. For example, you have to read the question. Most of the time you have to write out a diagram or two. This involves going through the rules one by one. These steps are vital – without them you cannot get the right answer. Each of these steps takes a certain minimum amount of time; you cannot do them properly in less time than this. Yet most people feel like the only way to be good at the test is to rush through these most important steps.

What happens when you rush through the most important stuff? You end up making mistakes, getting confused, and/or getting tired. You don't want that. What happens if you slow down? You get the questions right, and everything feels much easier. In the long run, you'll be faster overall because you'll be less tired and won't have to double-check your answers. Why don't people slow down? Because they feel like they can't afford it – if they don't go faster, they won't finish the test.

This is a very common and very dangerous mistake to make. Let's analyze it: the goal is to do well. If you don't rush (you assume), you won't do well because you won't finish in time. But, if you do rush, you won't do well, because you can't be accurate if you are going too fast. Damned if you do, damned if you don't.

Except you *don't have to rush*. The people who wrote the LSAT wrote the test to be possible; if a high score were un-gettable (by regular people, not just by professional test prep teachers), the test would be a waste. The people who wrote the LSAT know their business; they know how long it takes to do the steps necessary for a question, and they know what these steps are. Each game is written to be doable in the given time, doing all the required steps. If you do what you need to do on a game and you do it in the amount of time it takes (not rushing through), you will have enough time to get most of the questions right. I promise.

Of course, this assumes that you aren't wasting a lot of your time wondering what to do, or worrying about the test... Wouldn't you rather give those things up, and be able to do the logic games more comfortably?



#### **4. Working through fatigue**

It's midnight. You're exhausted from a hard day at work or school. How do you become un-exhausted? Go to the gym? Read a bunch of philosophy? Plan a new business venture? No, of course not – you go to sleep. The only way to relieve fatigue is through rest.

If you are fatigued on the LSAT, what should you do? Another question? Same idea – that question is not going to make you less tired; in fact, you are more likely to miss it because you are tired. What should you do? *REST.*

While you are resting, you won't be doing any questions, and that's scary, isn't it? But, if you don't rest, you'll keep slowing down (and missing questions) as you get more and more tired. If you do take a short rest (20 minute naps aren't necessary) you'll come back faster and more accurate, more than compensating for the time "lost." Resting time is never wasted time.

#### **5. Worrying and/or changing your strategy**

The LSAT is going to be psychologically difficult; it's a tough test and at times you will feel like you are getting questions wrong. Worrying about it doesn't do you any good (exactly what my mom used to tell me in fifth grade) and it actually hurts you – it wastes time and distracts you (it's a form of multitasking). It's tough, but work on putting how you are doing out of your mind when you are practicing; eventually you will get used to focusing on what you are doing, rather than on how well you did earlier.

During the LSAT, people often feel like they're doing badly when they are in fact doing quite well. This causes them to change their approach to the test – they deviate from the strategy they've been using (the same strategy that has caused them to do well thus far). This, in turn, causes them to do worse from that point forward. Don't do this, either when practicing or during the test. Trust yourself and stick to what you *know* works; you aren't going to be able to figure out a better strategy in the middle of the LSAT.

#### **Putting It All Together**

There are several key skills that we have discussed above. These are the things that you are going to do to make the test easier. They are so important that I'm going to say them again.

1. Learn the logic
2. Have a system for everything that might be on the test
3. Have an energy-efficient approach to work
4. Read carefully
5. Do one thing at a time
6. Take breaks when needed

I want you to notice something – each of these points is phrased as a positive, something for you to *do*, not something to *not* do. People tend to focus on negatives, but it is more important to know the right thing to do. The only way to avoid mistakes and problems is to *do* the right thing. It's important to avoid bad things, but you only get points by doing the right thing. When you notice yourself making mistakes, don't just ask "What did I do wrong?" Also ask, "What should I have *done*? What will I do next time in this situation?"

### **1. Learn the logic**

I'm going to devote sections of this book to teaching you the logic you need to know for this test. It's not as complex as you may think, and it is all based on common-sense ideas you probably already understand.

### **2. Have a system for everything that might be on the test**

This is most of why I wrote this book. The logic you are tested on in the LSAT logic games is, like I said, fairly straightforward. What makes the test so difficult is the way in which you are tested – the number of questions, the phrasing of the sentences, and the time pressure. Knowing exactly what you are going to do, and in what order, at any given moment of the test will relieve pressure, and it will eliminate time wasted wondering what to do. And, if it is a *good* system (and my system is the best there is) it'll help you answer the questions as accurately and efficiently as possible.

That said, I want to give a little warning. Once you learn a way of doing things from this book, stick to it. The more you do it, the better you'll be at it – faster and more accurate – and the less you'll have to think about it, which will make the questions easier. One of the big time-wasters I see is that students look for a faster or better way of doing a question or diagramming a game, even though they *already know* a viable method for it. Be consistent in your approach to games. The best way to be good at the test is to have good habits, and habits are formed by repetition.

### **3. Have an energy-efficient approach to work**

Being efficient means minimizing waste. People waste energy on logic games by thinking too much. Typically this involves trying to figure things out in their head, as opposed to writing them down. Writing everything down and doing all your work on the page, rather than in your head, seems slower because it involves the extra step of writing. But, in fact, it is more efficient than just thinking questions through. There are several reasons for this. First, if you write down everything you do, you can "forget" each step after you do it, since your notes will remember all the relevant information for you. You can focus all your attention on each step you do, rather than splitting your attention between what you are doing now and what you just did. In addition, writing things down allows you to involve more parts of your brain – the visual and tactile – in the test process. You are more likely to catch mistakes you make when they are written down, and you are less likely to make those mistakes in the first place. Finally, you can use your written work to help you out on later questions. We'll learn an efficient method as we go through the book.

Often, as students get better, they feel that they can be a little sloppier on questions – doing things in their head and/or doing several steps of a question at once. This inevitably leads to them missing more questions. The reason you can get answers quickly and accurately is that you are good at doing what needs to be done on a question. Trying *not* to do this will make you miss a question. Trying to do it in your head will, in the long run, tire you out. Don't try to change the way you approach a question once you get good at it – this totally negates the advantage of having learned to do it.

### **4. Read carefully**

Every single word in the Logic Games section is crucial. You don't want to miss a single one of them. Read everything – the rules, the questions, the answers – carefully, making sure you take everything in. You aren't reading slowly for the sake of reading slowly, you are reading *carefully* – understanding every single thing said.

### 5. Do one thing at a time

Focus on the step you are doing while you are doing it, and ignore everything else. Don't worry about what equation you'll solve next, or what you are going to do with the information you get out of this diagram; once you've finished doing what you are doing, then you can think about the next step.

### 6. Take breaks when needed

There is a science to taking breaks. This takes a bit of explaining, so get ready and pay attention to this.

The first rule is: when you feel the onset of stress or fatigue, take a break. If you feel your concentration slipping, stop working for a bit. Stare at the ceiling. Rotate your shoulders. Breathe deeply. In other words, relax. Do this for as long as a minute or as little as a few seconds, whatever you need. It is perfectly OK to spend 60 seconds doing nothing at all during a test, as long as you are doing it *on purpose*.

Take these breaks every time you start to lose concentration. This may mean taking a short break every four or five questions towards the end of the test. It is better to do this than to lose focus.

When I took the Bar exam I went to the bathroom three or four times per section (a section is three hours long). Was I nervous? Had I drunk too much coffee? No; I didn't even use the facilities most of those times, just looked myself in the mirror, smiled, maybe splashed some water on my face, and walked back to my seat.

Just walking to the bathroom took at least a minute, so these breaks probably lasted at least 3 minutes each. This time was totally refreshing, and really useful in keeping me on track. I ended up finishing each section before the majority of people taking the test, despite having "wasted" 10 minutes a section going to the bathroom, in good part because I was always focused.

Plus, since I was wearing boots, I made a lot of noise, and everyone had to look at me... I was wearing a three-piece suit, because I believe in dressing for success, so that made me think of how good I looked, and how everyone was looking at handsome me, which boosted my confidence and got my mind off the test. Ridiculous, I know, but these little confidence builders can be very useful; I'll talk more about them in the chapter called **During the Test**.

This will require that you learn to tell when you need a break. There are several ways to do this. One is to be aware that you will inevitably lose focus when you are studying; if you are ready for it you'll notice it when it happens, and take a break. Let me repeat that: when you study, take a break every time your concentration starts to slip. This is practicing what you should do on the actual LSAT; by the time you get to the real test, you'll be good at this. You'll also get better at noticing when you need a break.

Another method of learning when to take breaks is to look at your performance on a series of questions after the fact. If you tend to miss questions in blocks – missing several in a row, rather than spread out – that is a sign of fatigue. Questions aren't grouped by difficulty or skill; if you are missing a group of questions, that's a sign that the problem is you and not the questions. Notice how often these blocks of missed questions occur. If they occur with some regularity, that shows you when you are getting fatigued. For example, I had a student who, like clockwork, would get five questions right, three wrong, five right, three wrong. This told me that she got tired every five questions. Patterns don't

have to be so clear-cut; they are more likely to be a tendency, such as missing a few questions in a row every ten or so questions. Once you notice a pattern of when you get fatigued, start taking breaks at regular intervals – right before when you would normally get tired – so as to break the pattern. The clockwork five-right three-wrong student needed to stop after every fifth question and take a break.

This isn't so relevant to logic games, because people also often miss questions in groups because they didn't understand the *game*, rather than because they got tired. But this is a very useful technique for analyzing your performance on Logical Reasoning, so I thought I'd throw it in for free.

You should also have a *rule* that you follow when studying, and when taking the test. My rule is to take a break after every logic game, no matter what. This means that, even if I feel great, I take a short break, generally just looking up from what I'm doing and moving my shoulders and neck around. This gives me a chance to get that game out of my mind, and to get sharp for the next game. Oftentimes you'll be too worried about the test, or too keyed up, to notice if you need a break. This rule guarantees that you'll maintain your focus and stay fresh. Follow this rule every time you study; by the time you take the LSAT, it'll be a habit, and require no thought.

### **What Do I Do Next?**

Feel tired? Take a break. When you feel mentally ready, begin reading the next chapter – **The Fundamentals**. Make sure you took notes on this chapter and that you use what you have learned here. I'll expand on much of it in later chapters, especially in **Game One** through **Game Three**, but I'll expect you to remember to take breaks, read carefully, and not multitask.