



# LEADERSHIP AND MANAGEMENT APTITUDE TEST REPORT

The Leadership and Management Aptitude Test (LMAT™) is a Cognitive perception assessment specifically designed to evaluate mental agility needed to perform successfully in management and leadership positions. The LMAT™ has five sections, each of which links to specific leadership and/or management skills or competencies. The table below describes these linkages.

Although the LMAT™ uses similar categories to most of the other mainstream tests of cognitive ability, it differs in that it uses workplace or business oriented questions and scenarios that are highly valid in determining leadership and management capability.

Section of the LMAT™		Linked Management/Leadership Competencies
1	Verbal reasoning	Verbal reasoning is most linked to a manager or leader's communication and influencing skills.
2	Numeric reasoning	Numeric reasoning is most linked to a manager or leader's computational and analytical skills.
3	Logical reasoning	Logical reasoning is most linked to a manager or leader's problem-solving and decision-making skills.
4	Visual-spatial reasoning	Visual-spatial reasoning is most linked to a manager or leader's abstract reasoning ability and creativity.
5	Scenario-based reasoning	Scenario-based reasoning is most linked to a manager or leader's information assimilation, judgement and perception skills.

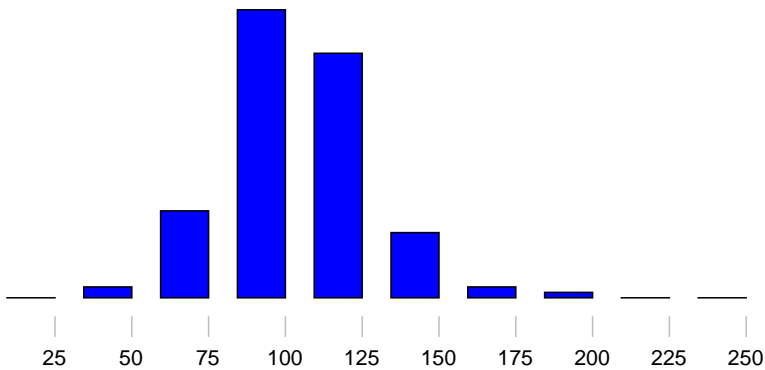
Test results for: Mary Sample

The LMAT™, a timed test of your skills in a number of areas important to your overall ability to lead and manage yourself and others. You were tested in 5 areas of reasoning:

1. Verbal
2. Numeric
3. Logical
4. Visual/Spatial
5. Leadership Scenario

The following are your results. The bar graphs show a distribution of scores from all other individuals in our database who have previously taken the LMAT™.

## Total Score

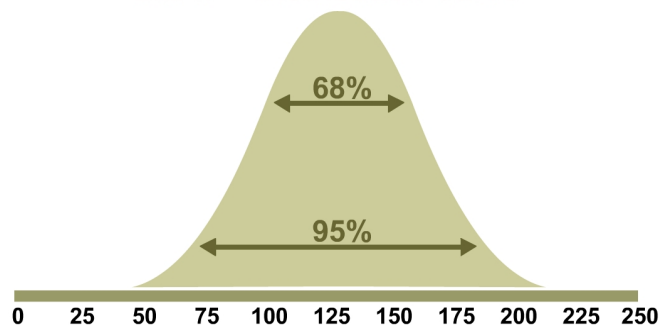


**Your Raw Score: 119**  
**Your Raw Score Percentage: 48%**  
**Your Database Percentile: 83%**  
**Database Median Score: 99**

Highest possible score: 250  
 Number of questions: 125  
 Time allocated: 60 minutes

You scored 119 on The LMAT™. Most people's overall LMAT™ score is between 62 and 144. In fact, 95% of all people have LMAT™ within that range. 68% of people score between 79 and 120. The following chart shows these percentages and where your LMAT™ score is on that scale.

**LMAT™ Distribution Curve**



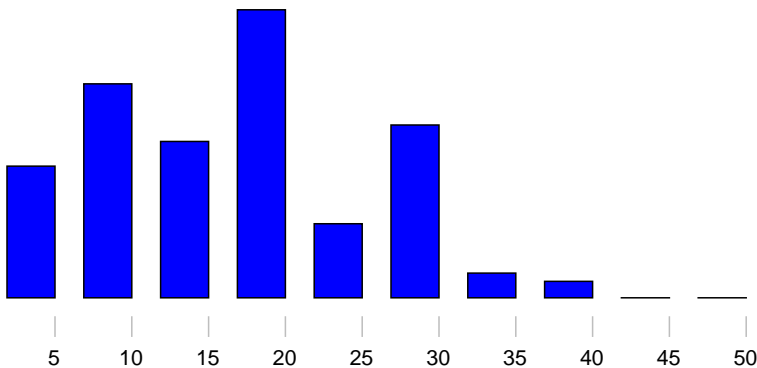
Naturally, there's more to your overall score on the LMAT™ than a single raw score or number. First of all the LMAT™ raw score is an aggregate of five individual sections. Secondly, the overall raw score is then converted into a percentage and then compared to the database of all past participants in the LMAT™ thus producing a "percentile" score.

# Your 5 LMAT™ Section Scores

Based on the results of your test, the LMAT™ reports your scores in five sections or dimensions — verbal reasoning, mathematical/numerical reasoning, visual-spatial reasoning, logical reasoning and scenario-based reasoning.

Here's how each of your scores break down:

## Section 1: Verbal Reasoning



**Your Raw Score: 12**

**Your Raw Score Percentage: 24%**

**Your Database Percentile: 39%**

**Database Median Score: 16**

Highest possible score: 50

Number of questions: 25

Time allocated: 10 minutes

Verbal Reasoning includes reading, writing and communicating with words and measures knowledge of vocabulary, ease in completing word analogies and the ability to think critically about a statement based on its form and structure.

Here's the type of question that contributed to your Verbal Reasoning scale score:

**DNOMETCU** Unscramble these letters to find an 8 letter word. Clue: Be sure to file the important \_\_\_\_.

*Answer=Document*

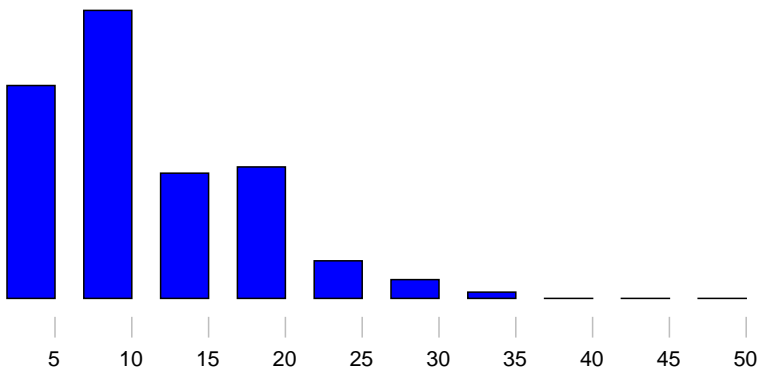
*(You either like and are good at anagrams or have to use the clue to reduce the possible options that are likely to fit here in order to get the right answer)*

## Improving your Verbal Reasoning Ability

Like anything, improving Verbal Reasoning ability requires some practice. Apart from reading the relevant sections from various revision books for tests such as the SAT or GMAT, here are a few simple mental exercises that could be particularly helpful to you:

- Doing crossword puzzles
- Reading more often, or different or more challenging kinds of books or materials
- Often looking up words that you do not understand in the dictionary
- Editing long documents or writing a short précis or summary
- Proofreading memos or reports

## Section 2: Mathematical/Numerical Reasoning



**Your Raw Score: 14**

**Your Raw Score Percentage: 28%**

**Your Database Percentile: 76%**

**Database Median Score: 8**

Highest possible score: 50

Number of questions: 25

Time allocated: 8 minutes

Your Mathematical/Numerical Reasoning score represents your combined ability to reason with numbers and to calculate in general.

This is the kind of question that helped to determine your mathematical/numerical score:

**What number should come next in the sequence?**

3 5 9 17 33

Answer: 65

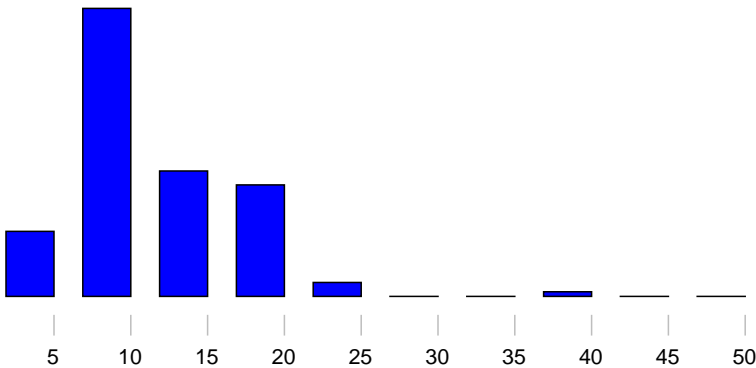
(the gaps between numbers in this instance were 2, 4, 8 and 16. The next gap should therefore be 32 meaning that  $33 + 32 = 65$ )

### Improving your Numerical Reasoning Ability

Like anything, maintaining or improving your numerical reasoning ability requires practice. Apart from reading the relevant sections from various revision books for tests such as the SAT or GMAT, here are a few simple mental exercises that could be particularly helpful to you:

- Doing number quiz exercises like Sudoku puzzles
- Balancing your checkbook
- Building or checking your monthly budget without the use of a calculator
- Predicting exactly what the change will be the next time you buy something in a store, or estimating the cost of your grocery bill, then checking the actual amount against your estimate
- Calculating the lunch bill in your head

## Section 3: Logical Reasoning



**Your Raw Score: 12**  
**Your Raw Score Percentage: 24%**

**Your Database Percentile: 68%**  
**Database Median Score: 10**

Highest possible score: 50  
Number of questions: 25  
Time allocated: 12 minutes

The LMAT™'s Logical Reasoning questions assess your ability to think things through. The questions determine the extent to which you use reasoning and logic to determine the best solution to a problem.

Here's the kind of question that contributed to your logical intelligence score:

**Mary can send a 6 page fax in 2 minutes at low resolution and a 3 page fax in 3 minutes at high resolution. If she has to send 10 pages in all in no more than the 8 minutes she has available to her, what is the maximum number of high resolution fax pages that Mary can send, and still remit all of the pages.**

- A) 3 Pages
- B) 5 Pages
- C) 6 Pages
- D) 7 Pages
- E) 9 pages

Answer =D) 7 Pages

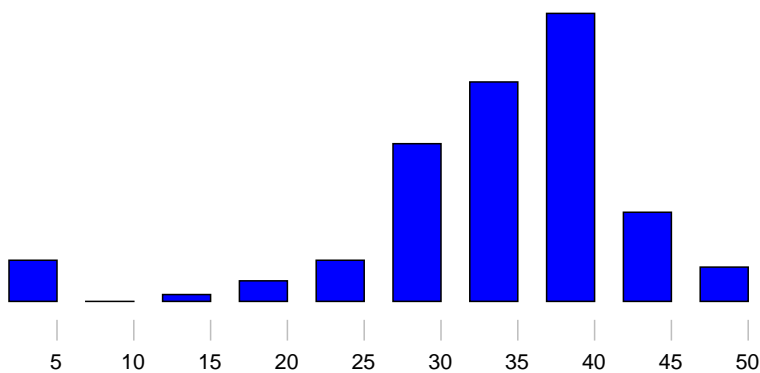
(In this case 3 fax pages at high resolution is a page a minute. The number of low resolution fax pages is 3 per minute. Hence, Mary can use 7 of her 8 available minutes sending high resolution pages and still send the 3 remaining pages at low resolution in the minute she has left.

### Improving your Logical Reasoning Ability

Like anything, maintaining or improving Logical Reasoning ability requires practice. Apart from reading the relevant sections from various revision books for tests such as the SAT or GMAT, here are a few simple mental exercises that could be particularly helpful to you:

- Engaging in brain teasers or difficult verbal puzzles or riddles
- Brainstorming ideas or different ways of doing everyday things
- Sometimes ignoring the instructions and relying on instinct or ingenuity to fix or assemble something
- Playing chess
- Trying cryptic puzzles or crosswords

## Section 4: Visual/Spatial Reasoning



**Your Raw Score: 46**

**Your Raw Score Percentage: 92%**

**Your Database Percentile: 100%**

**Database Median Score: 34**

Highest possible score: 50

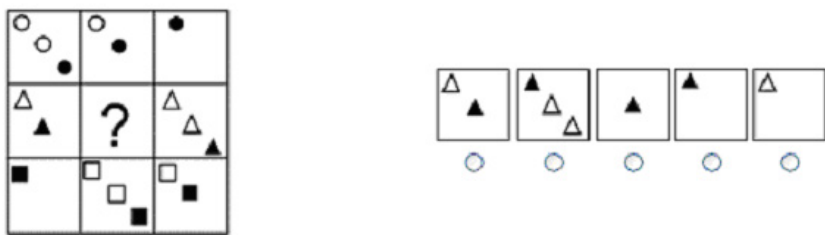
Number of questions: 25

Time allocated: 15 minutes

The Visual-spatial component of the LMAT™ measures your ability to extract a visual pattern and from that envision what should come next in a sequence.

Here's the type of question that contributed to your Visual-spatial Reasoning score:

Which square belongs in the centre of this grid?



Answer: C

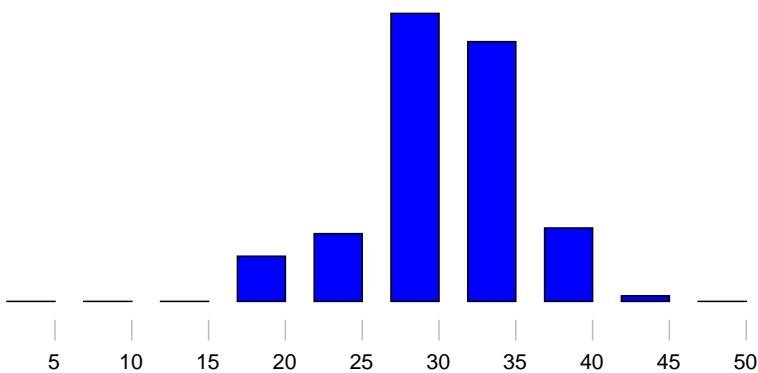
(In this case, each row and column has 1, 2 and 3 objects in the individual box. The C option (which has one object fits as the remaining number both vertically and horizontally).

### Improving your visual/spatial ability

Like anything, maintaining or improving visual-spatial reasoning ability requires some practice. Apart from reading the relevant sections from various revision books for tests such as the SAT or GMAT, here are a few simple mental exercises that could be particularly helpful to you:

- Geometric shape identification as you examine the environment around you
- As in verbal reasoning, Playing chess is particularly useful, or video/computer games like Tetris
- Studying maps and even become the navigator on your next trip
- Sculpting, photography or drawing
- Looking at perspectives and patterns in indoor or outdoor scenery

## Section 5: Leadership and Management Scenario Reasoning



**Your Raw Score: 35**  
**Your Raw Score Percentage: 70%**

**Your Database Percentile: 89%**  
**Database Median Score: 30**

Highest possible score: 50  
Number of questions: 25  
Time allocated: 15 minutes

The LMAT™'s Scenario-based Reasoning questions assess your ability to think about particular leadership situations and to make educated estimates about what is likely to work best in response to each case presented to you.

Here's the kind of question that contributed to your Scenario-based Reasoning score:

A few individuals on your usually high performing team have been underperforming in minor ways for a few weeks but you have said nothing so far. What would you do now?

- Call the whole team together to discuss the need for better performance than the past few weeks.
- Talk to lower performing people on the team individually (one at a time).
- Ask one of the more trusted and longer experienced people on team what they think you should do.

Answer: B)

*B is best here because not all individuals are poor performing.*

*A is second best as at least you can talk about lower overall team performance (which may make those people most responsible lift their performance -without others knowing who is involved).*

*C looks OK on the surface but not so good in allowing the team member decide what to do next (after all you are the leader and should be inviting input rather than decisions)*

### Improving your Scenario-based Reasoning Ability

Like anything, keeping or improving logical reasoning ability requires practice. Apart from reading books on management of leadership, here are a few simple mental exercises that could be particularly helpful to you:

- Generating several alternative paths of action that could be taken
- Engaging in new and different idea generation exercises
- Analyzing options at a deeper level or looking for root causes of problems
- Engaging in creative problem solving to generate new or different solutions

## **Interpreting your scores**

### **What factors helped determine my score?**

If your score isn't as high as you thought it would be, remember that there are plenty of external factors that can affect your performance on the test. If you were tired, hungry, ill or distracted, you might have scored lower than you expected because you were less able to concentrate. Your level of formal education and your familiarity with taking these kinds of tests may also influence how well you do. That's part of the reason these type of tests aren't a perfect measure of your reasoning ability. Your score would probably be quite different if the LMAT™ was designed to take into account your musical, creative or interpersonal skills, for example.

On their own, test scores can't predict someone's ultimate success or offer definitive guidance on an individual's actual potential for success at work. Many of the qualities that lead to great achievements are learned through culture, experience and education - not solely from doing well on a test. What your test score can help to explain however is how your mind tends to work best. By looking at each section of the LMAT™ individually, you can get a good idea of where you had the best (and worst) results and can therefore concentrate your efforts in the future, if you want to improve your overall score.

### **What do the percentiles mean?**

For each scale, The LMAT™ determined how many people received scores above and below yours. Your "percentile" represents what percentage of people scored lower than you. In other words, 90th percentile means you scored higher than 80 to 90% of people did, or only 10% of people scored higher than you did.

How are the percentiles determined? These percentiles were determined based on the many thousands of users who have already taken this test. We then adjusted these percentiles based on the entire database distribution. Hence, the percentiles we present reflect your score compared with all of the people in the entire database.

### **Limitations of LMAT™ Testing**

Much debate circulates around the different tests that are administered to assess intelligence or reasoning ability. Many researchers claim that the tests measure cultural knowledge and understanding, not innate intelligence. Critics suggest that many tests are racially and culturally biased. Outside factors, such as where you grow up, what kind of school you attended, and how much school you completed contribute substantially to the development of intelligence. However, it is not yet clearly understood what those factors are, or how they work. It is widely agreed that standardized tests, like the LMAT™, therefore do not accurately reflect all forms of intelligence.

Obviously, cultural knowledge, creativity, wisdom, common sense and social sensitivity are not measured in tests like the LMAT™, but they certainly contribute to a person's intelligence. Still, there are some people who feel strongly that intelligence or mental reasoning tests are one of the best ways to predict future performance. They feel that tests are better predictors of future success than other methods, such as interviews, exercises or references etc.

## **Further study of Intelligence**

Three researchers have made significant advances in this field in recent years:

1. **Robert Sternberg** - Has proposed three sub-theories of intelligence: context, experience, and the cognitive components of information processing. In short, intelligence involves either adapting to your environment, moving to another more appropriate environment or changing your environment. Your level of experience with the activities or knowledge being tested gets reduced to intelligence, but intelligence is best measured out of context — when you perform unfamiliar tasks.
2. **Howard Gardner** - Has proposed his "Theory of Multiple Intelligences" where there are seven independent but related intelligences: logical-mathematical, linguistic, musical, spatial, bodily-kinesthetic, interpersonal and intrapersonal. Gardner is one of the biggest proponents for developing new methods for testing intelligence. He speculates that intelligence is culturally and experientially based. One's experience will influence how much each of these can be expressed.
3. **John Horn** - Horn had proposed that there are two factors to intelligence: fluid intelligence and crystallized intelligence. Fluid intelligence is one's ability to reason and solve problems in novel or unfamiliar situations. Crystallized intelligence is the extent to which an individual has attained knowledge of her culture.

In general, recent research has focused on intelligence as something that can be changed - not as something that is fixed in childhood and as something culturally and experientially based. Most current researchers agree that there are multiple forms of intelligence, although there is no consensus on how many.

## **The Development of the LMAT™**

Over the last 18 months, the Worldwide Center for Organizational Development (WCOD), based in Los Angeles, has developed this test using proven, high-quality LMAT™ test questions.

## **Reliability of the LMAT™ Score**

Once we built the LMAT™, WCOD performed a large-scale study to compare the results of people who had taken both the LMAT™ and the established Shipley Institute of Living Scale (by Walter C. Shipley). The Shipley test has been used for more than 50 years to assess facets of intelligence. We did this to ensure that the way we constructed our test would yield reliable and valid LMAT™ results.

We used scores calculated by the Shipley test as a basis for calibrating WCOD's LMAT™. That ensured a high association between the two tests and, because of that, the validity of our LMAT™ scores. In fact, the LMAT™ is highly reliable-the Chronbach's alpha is .8. In other words, the questions on the LMAT™ are internally consistent and they all measure each section accurately.