Praise for the CR Grail

“The best thing about the CR Grail is that it focuses on understanding the meaning of arguments rather than on mere tricks to identify the conclusion, evidence, etc. The book is also written in a very student friendly manner with short chapters and to-the-point content. I found the fifth section of the book that talks about Causality and Representativeness the most useful.”

— Glen Wozniaski, GMAT 770 (MIT Sloan – Class of 2016)

“I endorse this one as well. Explains each question type really well. The division of SWAFE (strengthening, weakening, assumptions, flaw, and evaluate) and non-SWAFE questions is a good way to categorize things. The question bank is pretty impressive as well.”

— Jbumsumtak, Moderator, gmatclub.com, GMAT 770 (v-44,q-51)

“The CR Grail is a terrific book for Critical Reasoning. I used to think that Critical Reasoning was my strong area but the book still ended up teaching me some new things such as Passive Assumptions. I really like the book’s focus on assumptions and on avoiding jargon and diagrams. The best CR book out there!”

— Prerana Sharma, GMAT 740 (London Business School – Class of 2016)

“The best thing about the CR Grail is that it doesn’t use diagrams and unlayers Critical Reasoning concepts in a great way. Makes it easy to master Critical Reasoning.”

— Rishi Raj, beatthegmat.com Global Moderator, GMAT 760

“Being weak at Critical Reasoning, I pretty much referred to almost all the CR books out there and I can say without any doubt that CR Grail is the best and the most comprehensive of the lot. The best part about the book is the manner in which it covers all the concepts without getting verbose or using too many lines. The book is crisp and covers everything needed to ace the CR questions on the GMAT. A special mention for the practice question set that I found very useful.”

— Kevin Lee, GMAT 770 (Harvard – Class of 2016)

“The unique aspect of all Aristotle books is the easy and flowing manner in which they are written, and the CR Grail is no exception. It makes its point without getting dense or complex and one can understand all the concepts very easily. More importantly, one can actually understand how and where to apply these concepts. The third section of the book is really helpful and the question bank is also very useful. All in all, a great buy.”

— Bai Wong, GMAT 720 (Stanford – Class of 2017)
Dedicated chapter on 'Provide a Logical Conclusion' Questions—a new question type increasingly being tested on the GMAT
Practice set of 100 questions with 30% NEW content
QR codes to access 'Expert Speak' videos
In-depth coverage of all CR Question Types tested on the GMAT
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The *GMAT Critical Reasoning Grail 2017 Pocket Book* provides you with a glimpse of the *Wiley-Aristotle GMAT Critical Reasoning Grail 2017*—the only book you need to ace the Critical Reasoning questions in the GMAT Verbal Section.

The Pocket Book includes a selection of some key sections and abridged chapters of the main book, to help you understand the unique structured approach adopted to teach critical reasoning for GMAT.

For complete content coverage, please refer to the book *GMAT Critical Reasoning Grail 2017*. 
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SECTION 1
Introduction
About GMAT Critical Reasoning Grail 2017

Critical Reasoning (CR), even though part of the verbal section, does not really test you on your grasp of the English language. As the name suggests, this section is actually a test of your reasoning skills. The only verbal knowledge you need is that you have to be able to understand the meaning of the arguments and options given to you. The critical part of Critical Reasoning is that you have to read the question stem and the options very carefully. Even if you miss a particular word such as *some*, you could end up with a completely incorrect answer.

To most students, Critical Reasoning is the easiest of the three question types tested on the verbal section of the GMAT. Even if this is indeed so, it makes sense to maximise your accuracy in this section in order to compensate for the slightly lower accuracy rate you may end up with in the Sentence Correction and Reading Comprehension questions. The *GMAT Critical Reasoning Grail 2017* will help you do just that.

Unlike Sentence Correction, Critical Reasoning will not require you to go through myriad rules and exceptions to the rules. Critical Reasoning involves the use of just a few basic concepts and approaches to different question types. This book will take you through all of these, after which it will all boil down to practice.

Sections in this book at a Glance

**Section 1: About the GMAT** gives you a broad overview of the GMAT—test format.

**Section 2: Diagnostic Test** administers a diagnostic test that will help you assess your competence level in Critical Reasoning before you go through the various concepts and strategies in this book.

**Section 3:** Takes you through the basics of Critical Reasoning and discusses how arguments are constructed.

**Section 4:** Covers the different Critical Reasoning question types that are tested on the GMAT.
Section 5: Takes you through some common argument structures and some red herring terms that you should look out for in order to eliminate incorrect options.

Section 6: Practice Set contains a 100 question CR Practice Set to help you test your understanding of the concepts learnt in the this book and your ability to apply those concepts on CR questions based on the GMAT pattern.

Section 7: Quick Recall provides a Quick recap of all the important concepts and rules covered in this book. This section saves you the trouble of taking notes so you can concentrate on understanding the concepts. Go through this section before every practice test that you take.

One thing we have consciously tried to avoid is making the entire process of understanding arguments too mechanical by the use of symbols/diagrams. Instead our stress throughout this book will be on understanding the meaning of the arguments by looking for different signalling words and latching on to subtle hints provided in the arguments.

Special Features

The OG for GMAT Review 2017, 2016 and 2015, and GMAT Verbal Review 2017 and 2016 References

For most of the concepts covered in this book, you will also find OG question references that will provide you with the question number of similar questions present in the OGs 2015, 2016 and 2017 and also in the OG Verbal Review (VR) 2016 and 2017. As a result, you can see how the concepts explained in this book are actually tested on the GMAT.

Access Videos using QR Codes

The Critical Reasoning Grail includes ‘Expert Speak’ videos and other exclusive training content that you can easily access through
an app—on your smartphone or tablet—using the QR codes provided at various locations throughout the book. This will further help reinforce your understanding of the concepts.

To access the videos:

- **Step 1 – Download and Install the App on your Smartphone/tablet**
  To access the videos and other content, you will need to download the *Wiley Test Prep App* from either Apple’s App store (iTunes) or Google Play Store and install it on your Smartphone or tablet.

  - **For Apple devices:** Go to Apple’s App Store and search for *Wiley Test Prep*. Locate the app from the displayed results and click on Install.
  
  - **For Android devices:** Go to Google Play Store and search for *Wiley Test Prep*. Locate the app from the displayed results and click on Install.

While installing the app, you will be asked to key in the unique registration code printed on the last page of the GMAT Critical Reasoning Grail 2017 book. This registration code will work only once and on only one device.

- **Step 2 – Scan the QR codes and access your training content**
  Once you have installed the app, you can access the videos and training content on your mobile device by scanning the QR codes provided throughout this book.

  - Open the app and click on the Scan QR Code menu option available under the top right corner menu. This will start the scanning activity for that particular QR code.
  
  - Focus the camera of your mobile device over the desired QR code given in the book, and wait for a few seconds till you hear the ‘tick’ sound. Once the QR code has been scanned and found valid, you will be directed to the associated video/content.
  
  - Repeat the process for all other QR codes to access their associated videos/content.

**Note:**

1. The app login will be valid for 12 months from the date of activation.

2. The app login is valid only for one device.

3. In case of any difficulty, please reply to the confirmation email that you received when you registered for the app.

*The videos provided in this sample can be accessed using any generic QR code scanner.*
Clearing your Doubts/Queries

The purchase of the *GMAT CR Grail 2017* provides you direct access to the experts who have written this book. So, in case there is any concept or question discussed in this book that you do not understand, please put up the same on the Forums section of our website—www.aristotleprep.com. Our experts will respond to you within 48 hours and help clear all your doubts.

Learning Tools

Beyond the OG References and ExpertSpeak videos, the *GMAT CR Grail 2017* includes some key learning tools which will help you find the relevant preparation material in an organized and easy to access format. Some of these include:

- **Important Tips**: Highlights key tips and strategies
- **To sum it up**: Lists the key points at the end of each segment for easy recall

To sum it up, we have tried to make the *Wiley-Aristotle GMAT Critical Reasoning Grail 2017* as comprehensive and, at the same time, as student-friendly as possible. We are sure you will find this book useful in your GMAT preparations.

Good Luck and Study Hard!

The Aristotle Prep Team
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About the GMAT

What is the GMAT?

The GMAT stands for *Graduate Management Admission Test*. It is an exam required for admissions to MBA programs in the US and in other top business schools across the world. It is also required for admission to a few Masters and PhD courses.

It is important for you to know that the GMAT is a *computer adaptive test*. This means that the difficulty level of the next question in a section is determined by your performance on the previous questions. Therefore, as you progress through the test, the software continuously tries to evaluate your performance and adapts the difficulty level of the next questions to your performance on the previous ones. For this reason, you cannot skip or go back to attempted questions on the test.

What does the GMAT consist of?

The GMAT consists of four sections, which appear in the fixed order given below:

<table>
<thead>
<tr>
<th>Section</th>
<th>Time</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of an Argument Essay</td>
<td>30 minutes</td>
<td>1</td>
</tr>
<tr>
<td>Integrated Reasoning</td>
<td>30 minutes</td>
<td>12</td>
</tr>
<tr>
<td>Quantitative</td>
<td>75 minutes</td>
<td>37</td>
</tr>
<tr>
<td>Verbal</td>
<td>75 minutes</td>
<td>41</td>
</tr>
</tbody>
</table>

There are two optional 8-minute breaks during the GMAT. The first one is after the Integrated Reasoning section and the second one is after the Quantitative section.

*Integrated Reasoning questions can be further divided into the following four question types:*

- Graphics Interpretation
- Two-Part Analysis
- Table Analysis
- Multi-Source Reasoning
Quantitative questions can be further divided into the following two question types:

- Problem Solving
- Data Sufficiency

Verbal questions can be further divided into the following three question types:

- Sentence Correction
- Critical Reasoning
- Reading Comprehension

How am I scored on the GMAT?

The GMAT scores range from 200–800. A score of 200 is the lowest you can get and a score of 800 is the highest. For each section, you get something called a scaled score and there is also a percentile score corresponding to a scaled score.

- **AWA** – This section is scored on a scale of 0–6 in half-point increments.
- **Integrated Reasoning** – This section is scored on a scale of 0–8 in one-point increments
- **Quantitative and Verbal** – These two sections are scored on a scale of 51. The GMAC does not reveal how exactly this score is calculated, but we do know for sure that the difficulty level of the questions you get correct/incorrect plays an important role in determining your final score on the test.

When can I take the GMAT? How many times is it conducted in a year?

The GMAT can be taken at any time of the year. You sign up to take the exam INDIVIDUALLY, whenever you are free. The only thing to consider is whether the date, on which you want to take the exam, is available at the test centre of your choice. This is important in big cities such as New York, Los Angeles, Beijing, New Delhi, and so on, where the number of test takers is quite high and you may have to book a slot usually a month or two before your exam date.
How do I register for the GMAT and how much is the exam fee?

You can register for the GMAT by logging on to http://www.mba.com/ and then going to the registration page. The GMAT exam fee is $250, as of 2016.

What should I do after taking my GMAT?

If your actual GMAT score is lower than what you would like it to be, you can always retake the test. However, if you feel you have got a satisfactory score, it is time to start working on your business school applications. You will need to start off by shortlisting schools based on criteria such as your desired field of study, your GMAT score, the country or region you want to be in, etc. At Aristotle Prep, we have a full fledged counselling division that can assist you with the business school application process. You can go through www.aristotleprep.com for details.

How do I prepare for the GMAT?

As with most other similar tests, you can start off by revising the basics of the quant and verbal concepts that are tested on the GMAT. Books such as this one are one of the best ways of doing so.

Once you have completed your basics, it’s time to apply all that learning on actual GMAT questions. At this point, you will also want to get your hands on the The Official Guide for GMAT Review (OG) set of books as these are the only source of actual GMAT questions.

Once you have completed all the questions in the OG, you need to start taking a few timed online practice tests. The GMAC provides you two such practice tests (called the GMATPrep) for free on the official GMAT website: www.mba.com. You can access two more of these tests by purchasing them separately.

Once you start scoring within 20-30 points of your desired score in the GMATPrep tests, it is time for you to book your test date and take the real GMAT.

While you need to work hard to get a good GMAT score, you also need to work smart. For in-depth discussion on some general smart GMAT test taking strategies, refer to the complete book GMAT Critical Reasoning Grail 2017.
Basics of Critical Reasoning

Every Critical Reasoning question that you see on the GMAT will have three parts to it:

1. **The Stimulus**: This is the main body of the argument.

2. **The Question Stem**: This is the one or two lines below the stimulus that actually tell you what you need to do—find the assumption, strengthen, weaken, etc. In *Provide a Logical Conclusion* question type, this tends to be above the stimulus.

3. **The Options**—Each question will have five options from which you will need to identify the correct one.

The stimulus will usually appear in two forms—as an argument or as several statements of facts. To understand the difference between the two, let’s look at what makes up an argument. Most arguments will have the following three parts—Conclusion, Evidence, and Assumption.

**Conclusion, Evidence, and Assumption**

Let’s try to understand these terms with an example:

People don’t like to visit the Evergreen Wildlife Park in the rainy season. This year, the park authorities have reconstructed all the roads inside the park. Therefore, people will like to visit the Evergreen Wildlife Park in the rainy reason this year.

**Conclusion**

This is the point of the argument and answers the question *What*, that is, what is the argument basically stating—*that people would like to visit the Evergreen Wildlife Park in the rainy season this year.*

Conclusions usually follow signalling words such as *thus, so, hence, therefore, etc.* In case there are no such words in the argument, try to paraphrase the entire argument in one line. This line would almost always be the conclusion of the argument.

**Evidence**

While the Conclusion tells you *What* the argument is saying, the Evidence tells you *Why* the argument is concluding what it is
concluding. In the above argument, why does the author conclude that people will like to visit the Evergreen Wildlife Park this year? Because the park authorities have reconstructed all the roads inside the park. So, this becomes your evidence.

Evidence usually follows signalling words such as *because, since, as a result of; etc.*

Thus, the conclusion tells you the *what* of the argument and the evidence tells you the *why* of the argument. Another way of looking at conclusion and evidence is that a conclusion will almost always be *an opinion* whereas the evidence will almost always be *a fact.* In the above argument, it is a fact that the roads inside the park have been reconstructed but it is the author’s opinion that people will like to visit the park this year.

**Assumption**

Let’s take another look at the above argument. You may now realize that, from the given evidence, we cannot necessarily arrive at the stated conclusion. The argument only states that people don’t like to visit the Evergreen Wildlife Park during the rainy season; it never states why people don’t like to do so. So the author *assumes* that the only reason people don’t like to visit the park in the rainy season is the poor condition of the roads within the park. If this is not assumed then the argument will fall apart.

For example, if the real reason why people do not visit the Evergreen Wildlife Park during the rainy season was the fact that it was impossible to see animals during this season, then even if the roads were made of velvet, people would not visit the park because bad roads was not the reason for people not visiting the park in the first place. Therefore, for the author to conclude that people will want to visit the park this year, he has to assume that the only reason people did not visit the park earlier was the poor condition of the roads inside the park.

So, now that you know what components make up an argument, let’s look at the relation among these. All arguments will have the following structure:
You can think of the assumption as unstated evidence or as a bridge between the evidence and the conclusion. If this bridge collapses, then you cannot arrive at the conclusion from the given evidence.

Here, it is very important to note that the assumption is always unstated evidence, that is, it will never be written in the argument. It has to be assumed in the mind. So, in a find an assumption question, if one of the options restates what is already mentioned in the argument, then this cannot be the assumption.

To summarize, with reference to the argument we saw earlier:

*The Conclusion:* People would like to visit the Evergreen Wildlife Park in the rainy season this year.

*The Evidence:* The park authorities have reconstructed the roads within the park.

*The Assumption:* The only reason people did not visit the Evergreen National park in the rainy season was the poor condition of the roads within the park.

One mistake students make is to assume that the last sentence of an argument will always be the conclusion. Nothing could be farther from the truth. The conclusion can be at the beginning of the argument, in the middle of the argument, or at the end of the argument.

**Argument with Conclusion at the Beginning:**

*The Wind Wane project is an excellent one for Sihora County.* The project will generate employment for the local population and also provide the residents with energy at low costs. In addition, it will also lead to the opening up of new schools and colleges in Sihora County.
Argument with Conclusion in the Middle:

The Wind Wane project will generate employment for the local population in Sihora County and also provide the residents with energy at low costs. Thus, the Wind Wane project is an excellent one for Sihora County. In addition, the project will also lead to the opening up of new schools and colleges in Sihora County.

Argument with Conclusion at the End:

The Wind Wane project will generate employment for the local population in Sihora County and also provide the residents with energy at low costs. In addition, it will also lead to the opening up of new schools and colleges in Sihora County. Thus, the Wind Wane project is an excellent one for Sihora County.

If the conclusion can be anywhere in an argument, how do you identify it? The answer is simple—by applying the What and Why method we discussed earlier.

What is the author saying (Conclusion)
The Wind Wane project is an excellent one for Sihora County.

Why is the author saying so (Evidence)
Because the Wind Wane project will generate employment for the local population in Sihora County, provide them with energy at low costs, and also lead to the opening up of new schools and colleges in Sihora County.

So, there you have your conclusion and evidence. The What and Why method is especially useful because it will actually force you to understand the meaning of the argument as a whole.

Stimulus with a Set of Facts

As stated earlier, some question stimulus’ will contain arguments but some may just contain statements of facts without any conclusion.
For example:

The sale of automobiles in Vino city has increased by more than 100% in the last one year. Out of this increase, more than 70% are Multi utility vehicles and Sports utility vehicles. Hatchbacks comprise the remaining 30% of the increase.

As you can see, the above stimulus just gives you some facts without arriving at any conclusion as such.

So, a stimulus can be in the form of an argument or it may just comprise a set of facts. This will to a large extent be determined by the question type that you get. For example, in a *Find the Assumption* question the stimulus will always be in the form of an argument and in an *Explain the Contradiction* question the stimulus will almost always contain facts.

**Initial Steps to Approach Critical Reasoning Questions on the GMAT**

- **Always start by reading the stimulus.** Some students prefer reading the question stem first but to us it’s a waste of time because you’ll read the question stem, then read the stimulus, and then read the question stem again.
- **Read the stimulus critically.** Pay attention to every word. In the end, summarize everything in your own words. If the stimulus is in the form of an argument, be clear on *What* the stimulus is stating and *Why* it is stating so.
- **Read the Question stem and use the strategy to tackle that particular question type,** as described in the subsequent chapters of this book.
- **Take an average of two minutes to answer each Critical Reasoning question.** This is an average figure, so some questions may take you longer and some may be completed in less than two minutes.
## To Sum it up

- **Assumption + Evidence = Conclusion**

- **Conclusion**
  - Gives the answer to *What* the author is saying
  - Almost always an opinion

- **Evidence**
  - Gives the answer to *Why* the author is saying what he is saying
  - Almost always contains facts

- **Assumption**
  - Is unstated evidence
  - Must be true for the argument to be true

- **Approach to Critical Reasoning**
  - Start by reading the stimulus and not the question stem
  - Read the stimulus critically and summarize in your own words
  - Read the Question stem and use the strategy to tackle that particular question type
  - Take an average of two minutes to answer each CR question

“This section is an abridged version of Section 3 of the *GMAT Critical Reasoning Grail 2017*. For complete content and more details, please refer to the book.”
SECTION 3
Critical Reasoning Question Types
The GMAT is a structured test so it will test you on a **predictable pattern**. In Critical Reasoning, there are certain question types that are tested again and again. We’ll be looking at each of these question types in this section of the book.

The CR questions tested on the GMAT can be broadly divided into the following types:

**GMAT Critical Reasoning Question Types**

1. Find the Assumption Questions
2. Useful to know/evaluate the Argument Questions
3. Strengthen the Argument Questions
4. Weaken the Argument Questions
5. Identify the Flaw Questions
   a. Vulnerable to the objection/criticism Questions
6. Inference Questions
   a. Must be true Questions
7. Explain the Paradox Questions
8. Provide a Logical Conclusion Questions
9. Miscellaneous Questions
   a. Bold Faced Questions
   b. Main Point Questions
   c. Parallel Reasoning Questions

We will take a look at each of these question types in detail over the next few chapters.

Scan this QR code to watch a video explaining the two major groups that each of the above question types can be divided into.
Assumption Questions

Assumption is the most important of all the Critical Reasoning concepts/question types. This is because assumption will give you the answer to five question types—Find the Assumption questions (but of course), Evaluate the argument questions, Strengthen questions, Weaken questions, and Flaw questions. We will see the connection between assumptions and each of these question types in subsequent chapters but first let’s take a look at assumption itself.

As we discussed in the previous chapter, an assumption is basically the unstated evidence that must be true for the argument’s conclusion to be true. The most important thing to keep in mind while trying to arrive at the assumption is that the author’s conclusion is true, even if it is the most absurd of conclusions. A lot of the times the problem students face is that they end up questioning the logic or validity of the author’s argument. Set aside that thought process for Weaken or Flaw questions. For Assumption questions, you must take the author’s conclusion to be absolutely one hundred percent true.

Therefore, if the author concludes that aliens will arrive next week then you must agree with this fact; only then will you be able to arrive at the assumption correctly. For example, in this case, one assumption may be that the shiny object in the sky is a space ship commanded by aliens. While it is extremely unlikely that the GMAT will give you such an outlandish argument, the reason we picked such an extreme argument is to drive home the point that whatever the author states has to be taken as the unquestioned truth. Never question the conclusion; instead focus your energies on identifying what else needs to be true for the author’s conclusion to be true and you would have arrived at the assumption.

Let us take a look at an example:

Over the past six years, most of the students in Tupac city have regularly attended colleges in the neighbouring Mekon city to pursue their graduate degrees. However, according to a recent change in the education policies of Mekon city, the colleges in Mekon city are expected to increase their fees to almost the same level as those charged by colleges in Tupac city. Therefore, it can be safely concluded that colleges in Tupac city will see a surge in the number of students enrolling with them to pursue their graduate degrees.
Which of the following is an assumption on which the argument depends?

A. The teachers at colleges in Mekon city are generally considered better than those at colleges in Tupac city.
B. Tupac city does not have good quality colleges.
C. The low fees charged by colleges at Mekon city is the primary reason why students from Tupac city move to these colleges.
D. Students who study at colleges in Tupac city do not perform better than those who study at colleges in Mekon city.
E. Mekon city does not have more colleges than Tupac city.

Always start an assumption question by paraphrasing the conclusion and the evidence.

Conclusion (What is the author saying): There will be a surge in the enrolments at colleges in Tupac city.

Evidence (why is the author saying this): Students in Tupac city who earlier used to move to Mekon city to pursue their graduate degrees will now not do so as the colleges in Mekon city will charge them the same fees as the colleges in Tupac city do.

Note that the conclusion is an opinion of the author but the evidence is a fact—the colleges in Mekon city are definitely looking at increasing their fees.

The Importance of Predicting the Assumption

On assumption questions, it always helps if you already have a rough answer in mind before you look at the options as this can prevent you from getting confused between or among very close choices.

For example, given the above conclusion and evidence, in order to arrive at the conclusion from the given evidence, what must the author of the argument be assuming?

The author must be assuming that the low fees charged by colleges in Mekon city is the single most important factor why students from Tupac city have been moving to colleges in Mekon city. If we don’t assume this, the argument will fall apart.
For example, if students have been shifting to Mekon city because the teachers in Mekon city are better than those at Tupac city then, even if the fees at the colleges in Mekon City go up, students will keep on moving to Mekon city because the reason for the shift is the better quality of teachers.

So, for the author’s conclusion to be true, he has to assume that the only reason students have been shifting to colleges in Mekon city is the low fees charged by colleges in Mekon city. Option C states this best and, hence, is the correct answer.

However, just to get more clarity, let’s take a look at the other options as well:

A. This fact actually weakens the argument because in this case the students will keep on shifting to colleges in Mekon City.

B. Quality of colleges is outside the scope of the argument because the argument is only concerned with the fees charged by colleges. In fact, just like option A, B could also weaken the argument by suggesting that lower fees is not the reason why students have been moving to colleges in Mekon city.

C. The correct answer.

D. This may or may not be the case but doesn’t have to be the case for the author’s conclusion to be true.

E. The number of colleges in each city is of no consequence to the argument.

The Denial/Negation Rule for Assumption questions

On Assumption questions, in case you are confused between two or more options, an effective way to eliminate incorrect options is by applying the Negation rule to the answer choices. The Negation or Denial rule is based on the principle that the assumption has to be true for the argument’s conclusion to be true. As a corollary to this, if the assumption is denied or negated, then the argument must fall apart.

Hence, under the Negation rule, all you do is try to deny or negate each option and check whether the argument’s conclusion can still be true. If it can be true then this option is not the assumption. Likewise, if denying an option makes the conclusion fall apart then this option has to be the assumption.
Let’s try the denial rule with each of the options in the Tupac city vs. Mekon city question discussed above:

A. The teachers at colleges in Mekon city are generally NOT considered better than those at colleges in Tupac city.

Negating this option does not help in any way because the argument is never about the quality of teachers in the first place. In its original wording, this option was weakening the argument, now it is not doing anything.

B. Tupac city does not have good quality colleges.

Since this option already contains the word *not*, the ideal way to negate this is to remove the *not*. Again, this does not explain why students have been shifting in the first place and quality of colleges is never the issue anyway.

C. The low fees charged by colleges at Mekon city is NOT the primary reason why students from Tupac city move to these colleges.

Negating this option definitely makes the argument fall apart because in this case the students will keep on shifting to colleges in Mekon City even after the increase in fees. Then, there will be no surge in enrolments at colleges in Tupac city. So, this option has to be the assumption.

D. Students who study at colleges in Tupac city do not perform better than those who study at colleges in Mekon city.

Again strike out the *do not* from this option to negate it. Like option B, if this were to be the case then the students wouldn’t have been shifting from Tupac city to Mekon city in the first place

E. Mekon city does not have more colleges than Tupac city.

The number of colleges in either city is of no consequence to our argument.

So, you can see that the denial or negation rule can come in very handy when you are confused between options. However *don’t apply this rule on all the five options* and waste your time. Two or three options can usually be eliminated easily; apply this rule to the remaining options and only if you are confused between them.
Active and Passive Assumptions

**Active assumptions** are those assumptions that actively support the argument. These are the assumptions you come up with when you are trying to predict an assumption. Active assumptions must be true for the argument to be true.

However, do notice the fact that the moment you assume that something must be true in an argument, you automatically assume that the other possibilities must NOT be true. It is these other possibilities that we call **Passive Assumptions**.

For example, in the Tupac city vs. Mekon city argument discussed earlier, the moment the author assumes that the primary reason students have been moving to colleges in Mekon city is the low fees charged by these colleges, he automatically assumes that other factors (such as better quality of teachers or better infrastructure) cannot be the reason for this shift. So, the following can also be assumptions in that argument:

- The better quality of teachers at colleges in Mekon city is *not* the primary reason why students have been shifting to colleges in Mekon city.
- The better infrastructure at colleges in Mekon city is *not* the primary reason why students have been shifting to colleges in Mekon city.
- The large number of clubs and entertainment centres in Mekon city is *not* the primary reason why students have been shifting to colleges in Mekon city.

Notice that denying any of the above assumptions will make the original argument fall apart.

As you can see, we can keep on making as many passive assumptions as we want. This is the biggest difference between active and passive assumptions. There can only be one active assumption in an argument but there can be several passive assumptions. This is precisely the reason that you cannot predict a passive assumption whereas you can predict an active assumption.

You may have noticed that all the passive assumptions written above contain the word *not*. This is the best way to identify passive assumptions since by definition they will always contain some negating word, most often *not*.
Let’s look at one final example to understand active and passive assumptions.

It takes four hours to cover the distance between Aston and Torin cities by bus. John has boarded a bus at Aston city that is scheduled to depart for Torin city at 10:00 a.m. If the bus departs on time, John will reach Torin city well in time to attend his interview scheduled for 4:00 pm that afternoon.

**Active Assumption**: The bus will not get delayed on the way from Aston to Torin.

**Passive Assumptions:**
- The bus will not have a flat tire or all four flat tires.
- The bus will not be struck by lightning.
- The bus will not be attacked by gunmen.
- The bus driver will not decide to go to some other city, etc.

So the active assumption gives you one general assumption while the passive assumption gives you several, each of which refutes the possibility of the active assumption not being true.

Do not get unnecessarily confused between active and passive assumptions since, on the GMAT, nobody will ask you to distinguish between or identify the two. Just know that there is something like a passive assumption so that when you see it on a question you don’t end up eliminating it immediately.

Now, let us try another question:

Eating unhygienic food always results in cases of stomach infection or food poisoning. Dominic is currently suffering from food poisoning, so he must have eaten unhygienic food in the last few days.

Which of the following is an assumption on which the argument depends?

(A) Eating unhygienic food will most definitely lead to food poisoning.

(B) Dominic does not have a weak immune system that makes him prone to food poisoning.
(C) Dominic can identify the difference between hygienic and unhygienic food.
(D) Eating unhygienic food is the only way to get food poisoning.
(E) Unhygienic food contains harmful bacteria and other pathogens that lead to food poisoning.

The Conclusion
Dominic must have eaten unhygienic food in the last few days.

The Evidence
Eating unhygienic food always leads to food poisoning and Dominic is currently suffering from food poisoning.

The Assumption
The argument states that eating unhygienic food will always lead to a person getting food poisoning. There can be no question about this fact since this is given to us as evidence. However, the argument never states that this is the only way to get food poisoning. There could also be other ways of getting food poisoning such as drinking impure water or eating hygienic food with dirty hands.

So for the author’s conclusion to be true, he has to assume that the only way to contract food poisoning is by consuming unhygienic food. D states this best and should be the correct answer.

Let's look at the other options as well:

(A) This is clearly stated in the argument so cannot be the assumption. In fact, this is part of the evidence. Remember that an assumption will never be stated in the argument; it is always assumed.

(B) This option is a trap because it has been worded in the form of a passive assumption (notice the use of the word not). However, even if Dominic does have a weak immune system, he may still have contracted food poisoning from some source other than unhygienic food.

(C) Whether Dominic is able to identify the difference is irrelevant. In fact, it is possible that he could not identify the
difference, which is why he ended up having unhygienic food in the first place.

(D) The Correct Answer.

(E) How unhygienic food leads to food poisoning is not the concern of the argument.

The Following can be Passive Assumptions in the Argument:

• Drinking impure water cannot lead to food poisoning, *(because if it can then maybe this is how Dominic contracted food poisoning and not by consuming unhygienic food)*

• Eating with dirty hands cannot lead to food poisoning, *(because if it can then maybe this is how Dominic contracted food poisoning and not by consuming unhygienic food)*

The Wording of Assumption Questions

Assumption questions most often directly ask you to identify the assumption in the argument. However, sometimes they can be worded in the form of *must be true* questions.

Here is an example:

Which of the following must be true for the above argument to be true?

This shouldn't come as a surprise because conceptually an assumption must be true for an argument to be valid.

You'll see a variation of this ‘must be true’ question when we discuss *Inference Questions* later in this book.

How to Approach Assumption Questions

1. **Read the argument** and be clear on the evidence and the conclusion.

2. Know that, since this is an assumption question, there has to be some piece of evidence missing from the argument.

3. Try to **predict this missing piece of evidence**. In a *Find the Assumption* question, you must try to have an answer in mind before you look at the options.
4. **Eliminate two or three options** that look definitely incorrect. Possible wrong answer choices can be those that are outside the scope of the argument, that repeat what is stated in the argument, or that can be inferred from the argument.

5. If stuck between two or more options try the **denial or negation rule**.

Please reference these questions in the corresponding editions of the GMAT Official Guide

(OG 2017 – Q 552, 581, 585, 590, 607, 608, 616, 628, 635, 642, 650, 657)
(OG 2016 – Q 8, 37, 40, 41, 47, 49, 52, 70, 84, 90, 95, 101, 109, 114, 116)
(OG VR 2017 – Q 121, 153, 161, 174, 181, 184)
(OG VR 2016 – Q 17, 32, 57, 69, 75, 76, 80)

**To Sum it up**

- Assumption will never be written in the argument
- Never question the argument’s conclusion, however absurd
- Always predict the assumption before looking at the options
- Try the Denial/Negation rule if confused between options

- **Active Assumptions**
  - Actively support the argument
  - Can be pre-phrased or predicted in advance

- **Passive Assumptions**
  - Cannot be predicted because there can be several in an argument
  - Always use some negating word such as *not*

- **Assumption Questions** can also be worded as *must be true* questions

**The Importance of Terminology on GMAT Critical Reasoning**

1. **The Usage of Some, Many, Most, and Majority**

   While you may think that there is not much difference between these terms, there actually is a big difference. *Some or few* means
more than one but *most* means more than 50%. This can have a huge bearing when you get down to eliminating incorrect options.

Let us look at an example:

Four out of five students who study from Professor Larry score above 75% in their exams. So the credit for their excellent performance must go to Professor Larry.

Which of the following two options most strongly weakens the argument?

1. Some students who study from Professor Larry also take additional tuitions in the subject from Professor James.
2. Most students who study from Professor Larry also take additional tuitions in the subject from Professor James.

The argument is in the form of a cause and effect argument where the cause is Professor Larry and the effect is students getting excellent scores in their exams. The easiest way to weaken such arguments is to provide an alternative explanation (cause) for the effect.

Both the above options provide you with an alternative explanation—the fact that students also took classes from Professor James, so maybe Professor James is the cause and not Professor Larry. So does this mean that both the options weaken the argument?

No, it doesn’t.

Option one states that *some* students who study from Professor Larry also take classes in the same subject from Professor James. This doesn’t tell you anything relevant because some students may be taking these extra classes and some may not. For example, say the total number of students who take classes from Professor Larry is 100 and 5 of them also take classes from Professor James.

Now, the argument tells you that on an average, 80 out of these 100 students (four out of five) score 75% or above in their exams. Then even if the five students who studied from Professor James scored well because of Professor James’ teaching, how do you account for the remaining 75 students? It is still very probable that they performed well because of Professor Larry’s teaching. So the use of *some* does not take you to the answer.
However, *most* means more than 50% so out of the 100 students who study from Professor Larry, if 51 also take classes from Professor James, then this definitely raises a doubt as to whether these students are doing well because of Professor Larry or Professor James. Thus, this option weakens the argument by providing an alternate explanation to the stated conclusion.

The takeaway is that words such as *some, many,* and few will rarely give you the answer; instead look out for words such as *most, majority,* etc.

However, don’t follow this strategy as a blind rule. There is a situation in which *some* can give you the answer. Say an argument concludes that nobody in America uses wood fired stoves anymore. Now, if one of the options were to say that a *few or some* people in America still use these stoves, then this option would definitely weaken the argument.

To Sum it up

- Options containing terms such as *some* and *many* will rarely be correct
- Prefer options with terms such as *most* and *majority*
- If the option contains the word *not,* it might be a passive assumption or a passive strengthener
- Pay attention to the use of EXCEPT
  - If four options strengthen the argument, it is not necessary that the fifth will necessarily weaken it

This section is an abridged version of Section 3 of the *GMAT Critical Reasoning Grail 2017.* For complete content and more details on the remaining types of questions, please refer to the book.
SECTION 4
Critical Reasoning Practice Set
1. Financial Expert: Our country has a very high debt-to-GDP ratio and it’s difficult for a country with a high debt-to-GDP ratio to grow in a dynamic manner. Moreover, our debt is growing higher and that means inflation is getting worse. All in all, our country is badly managed these days.

Which of the following assertions is most strongly supported by the passage?

(A) High debt has an adverse impact on the inflation rate.

(B) It is not possible for a badly managed country to grow in a dynamic manner.

(C) High level of debt is extremely detrimental to the growth of a country.

(D) Growing inflation is a sign of a badly managed country.

(E) Whatever growth is happening in this particular country cannot possibly be called dynamic growth.

2. In the early 1960s, Myanmar was the richest country in Asia, but then it closed its economy to the outside world and is now the poorest country in the region. However, Myanmar is now opening up its economy to the outside world once again, and so will soon regain its former glory. Thus, it makes sense for smart investors to invest in Myanmar.

Which of the following is an assumption on which the argument depends?

(A) A closed economy will rapidly deplete the financial resources of a country.

(B) The countries that dealt with Myanmar in 1962 will still be interested in dealing with it.
(C) If Myanmar does not open up its economy to the outside world, it will continue to remain poor.

(D) The severe internal unrest that has continued in Myanmar for the last several years is not responsible for its current financial state.

(E) At least some smart investors are currently aware of Myanmar’s past glory.

3. While critics have written off the APG company’s new Model T chandelier, owing to its poor sales across the globe, the Model T is actually not a complete failure because it has managed to sell 10,000 pieces in Eastern Europe, a market in which rival companies haven’t even managed to sell 5,000 pieces of their respective chandeliers.

Which of the following is assumed in the above argument?

(A) If a chandelier does not sell well in the Eastern European market, then it is a complete failure.

(B) The Eastern European market is the biggest market for chandeliers.

(C) If a chandelier sells well in the Eastern European market, then it cannot be considered a complete failure.

(D) The Model T is the only type of chandelier manufactured by the APG company.

(E) If the Model T had not sold in good numbers in Eastern Europe, then it could have been considered a complete failure.

4. G. Bell Corporation, a manufacturer of mobile handsets, has claimed to have become the leading seller of mobile handsets, in terms of units sold, in the country. According to latest figures released by all the handset manufacturers in the country, G. Bell Corporation managed to sell 80 per cent of the total handsets that it manufactured during the year whereas the market leader, H. Wells Corporation, managed to sell only 50 per cent of its total handsets.
Which of the following identifies a flaw in G. Bell Corporation's reasoning?

(A) It does not take into account H. Wells Corporation’s huge book of advance orders for handsets that need to be shipped during the next year.

(B) It incorrectly assumes that the current trend will continue into the next year as well.

(C) It makes no comparison of the average price at which G. Bell Corporation sold its handsets and the average price at which H. Wells Corporation sold its handsets.

(D) It does not take into account the total number of handsets sold by either manufacturer.

(E) It does not take into account the total market size for mobile handsets in the country.

5. The supply of iron ore, the most important component in steelmaking, has been steadily declining in Marco city. This has forced steel manufacturing units in Marco city to source iron ore from far off mines leading to an increase in their transportation costs. Because transportation costs make up a large chunk of the total cost of steelmaking, the steel manufacturers in Marco city have had no option but to increase the selling price of their steel. This has, in turn, led to an increase in the retail price of utensils and other articles of daily use made of steel. Since the retail consumers now have to pay more for these steel items, while their earnings remain unchanged, they have decided to cut down on their non-essential expenditure such as that on movie tickets. This has led movie theatres in Marco city to reduce their ticket prices. Which of the following provides the most support for the assertion that the prices of movie tickets in Marco city will continue to decline in future?

(A) The people of Marco city will not be willing to cut down their expenditure on eating out.

(B) After the inauguration of the Gold port Bridge, expected to happen very soon, the transportation costs to Marco city will be halved.
(C) There are no blockbuster movies with stellar star casts lined up for release anytime soon.

(D) The supply of iron ore to Marco city is expected to go down even more in the near future

(E) Residents of Marco city view movie tickets as non-essential items of expenditure.
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Answers and Explanations

1. Financial Expert: Our country has a very high debt-to-GDP ratio and it’s difficult for a country with a high debt-to-GDP ratio to grow in a dynamic manner. Moreover, our debt is growing higher and that means inflation is getting worse. All in all, our country is badly managed these days.

Which of the following assertions is most strongly supported by the passage?

(A) High debt has an adverse impact on the inflation rate.

(B) It is not possible for a badly managed country to grow in a dynamic manner.

(C) High level of debt is extremely detrimental to the growth of a country.

(D) Growing inflation is a sign of a badly managed country.

(E) Whatever growth is happening in this particular country cannot possibly be called dynamic growth

Answer: A

Explanation:

Since this is an Inference question, let’s look at each option and eliminate.

(A) The argument clearly states that increasing debt is worsening the inflation rate, so then A can definitely be inferred.

(B) Cannot necessarily be concluded. We don’t even know what all things constitute a badly managed country, so then we definitely cannot conclude this.

(C) We know that high level of debt to GDP ratio is detrimental for the growth of a country but from this we cannot necessarily conclude that high level of debt by itself is extremely detrimental. If the GDP is also high then high level of debt could be a good thing.

(D) This may not necessarily be true because the argument states that all the things together constitute a badly managed country, but what is true for the whole may not be true for each part.
(E) The argument states that it’s difficult for this country to grow in a dynamic manner and not that it is impossible for this country to do so.

2. In the early 1960s, Myanmar was the richest country in Asia, but then it closed its economy to the outside world and is now the poorest country in the region. However, Myanmar is now opening up its economy to the outside world once again, and so will soon regain its former glory. Thus, it makes sense for smart investors to invest in Myanmar.

Which of the following is an assumption on which the argument depends?

(A) A closed economy will rapidly deplete the financial resources of a country.

(B) The countries that dealt with Myanmar in 1962 will still be interested in dealing with it.

(C) If Myanmar does not open up its economy to the outside world, it will continue to remain poor.

(D) The severe internal unrest that has continued in Myanmar for the last several years is not responsible for its current financial state.

(E) At least some smart investors are currently aware of Myanmar’s past glory.

**Answer: D**

**Explanation:**

The argument concludes that the only reason why Myanmar became the poorest country in the Asian region is because it closed its economy to the outside world. Thus, it assumes that there can be no other explanation for this fact. D is one such passive assumption, which has to be true for the conclusion to be true. If you negate D then the argument will fall apart.

(A) This may be inferred from the argument but is definitely not an assumption.

(B) Doesn’t necessarily have to be true. New countries may want to deal with Myanmar now.
(C) Again, this may be an inference but is not an assumption.

(D) The correct answer.

(E) Irrelevant to the argument.

3. While critics have written off the APG company’s new Model T chandelier, owing to its poor sales across the globe, the Model T is actually not a complete failure because it has managed to sell 10,000 pieces in Eastern Europe, a market in which rival companies haven’t even managed to sell 5,000 pieces of their respective chandeliers.

Which of the following is assumed in the above argument?

(A) If a chandelier does not sell well in the Eastern European market, then it is a complete failure.

(B) The Eastern European market is the biggest market for chandeliers.

(C) If a chandelier sells well in the Eastern European market, then it cannot be considered a complete failure.

(D) The Model T is the only type of chandelier manufactured by the APG company.

(E) If the Model T had not sold in good numbers in Eastern Europe, then it could have been considered a complete failure.

Answer: C

Explanation:

In this question, students often get confused between options A and C because they feel that the two options are saying the same thing. However, this is not the case. It is very much possible that a chandelier does not sell well in Eastern Europe but it sells in huge numbers in the rest of the world. Then it obviously cannot be considered a failure. Thus, A is not a valid assumption. C, on the other hand, has to be true if the argument has to stand.

(A) Doesn’t necessarily have to be true as explained above.
(B) The size of the Eastern European market has got nothing to do with the assumption.

(D) The range of chandeliers manufactured by the APG Company makes no difference to the assumption.

(E) This could be an inference at best but not the assumption by any stretch.

4. G. Bell Corporation, a manufacturer of mobile handsets, has claimed to have become the leading seller of mobile handsets, in terms of units sold, in the country. According to latest figures released by all the handset manufacturers in the country, G. Bell Corporation managed to sell 80 percent of the total handsets that it manufactured during the year whereas the market leader, H. Wells Corporation, managed to sell only 50 percent of its total handsets.

Which of the following identifies a flaw in G. Bell Corporation’s reasoning?

(A) It does not take into account H. Wells Corporation’s huge book of advance orders for handsets that need to be shipped during the next year.

(B) It incorrectly assumes that the current trend will continue into the next year as well.

(C) It makes no comparison of the average price at which G. Bell Corporation sold its handsets and the average price at which H. Wells Corporation sold its handsets.

(D) It does not take into account the total number of handsets sold by either manufacturer.

(E) It does not take into account the total market size for mobile handsets in the country.

Answer: D

Explanation:

Note that the argument states that G. Bell sold 80% of its total production (and not of the total market size) and H. Wells sold 50% of its total production. For the conclusion to be true, the argument has to assume that the total number
of handsets manufactured by the two manufacturers are the same, but this may not be the case. D questions this fact and so is the correct answer.

(A) Future sales are outside the scope of the argument. For all you know, G. Bell could also have equally large advance order bookings.

(B) The argument assumes no such thing.

(C) The argument is concerned with units sold so the price is outside the scope.

(D) The correct answer.

(E) The total market size is again irrelevant because we don’t know how much of the total market size each of the two manufacturers account for.

5. The supply of iron ore, the most important component in steelmaking, has been steadily declining in Marco city. This has forced steel manufacturing units in Marco city to source iron ore from far off mines leading to an increase in their transportation costs. Because transportation costs make up a large chunk of the total cost of steelmaking, the steel manufacturers in Marco city have had no option but to increase the selling price of their steel. This has, in turn, led to an increase in the retail price of utensils and other articles of daily use made of steel. Since the retail consumers now have to pay more for these steel items, while their earnings remain unchanged, they have decided to cut down on their non-essential expenditure such as that on movie tickets. This has led movie theatres in Marco city to reduce their ticket prices.

Which of the following provides the most support for the assertion that the prices of movie tickets in Marco city will continue to decline in future?

(A) The people of Marco city will not be willing to cut down their expenditure on eating out.

(B) After the inauguration of the Goldport Bridge, expected to happen very soon, the transportation costs to Marco city will be halved.
(C) There are no blockbuster movies with stellar star casts lined up for release anytime soon.

(D) The supply of iron ore to Marco city is expected to go down even more in the near future.

(E) Residents of Marco city view movie tickets as non-essential items of expenditure.

**Answer: D**

**Explanation:**

This argument consists of a series of cause and effects, wherein the effect of one event becomes the cause of another event. The last item in this chain is the reduction of movie ticket prices by movie theatres in Marco City. So, one entire chain of cause and effect has ended with movie theatres lowering their ticket prices. Now, why will the movie theatres lower their ticket prices even further? Only if the cycle of cause and effect were to start all over again and continue on and on. Since the cycle starts with the decline in supply of iron ore to Marco city, for the cycle to continue the supply of iron ore has to keep on decreasing in future as well. **D** states this and is the correct answer.

(A) Unless we are told whether the expenditure on eating out is essential or non-essential expenditure, this point will be irrelevant to the argument.

(B) This should actually weaken the argument by suggesting that the impact of reduced iron ore supply could be absorbed by the reduction in transport cost.

(C) The presence of blockbuster movies is outside the scope of the argument.

(D) **The correct answer.**

(E) Even if this is so, the movie ticket prices should stabilize at their new low prices. Why should they go down further?