

# When Not to Use Parallelism on the GMAT

We know that we are often tested on parallelism on the GMAT. The logically parallel entities should be grammatically parallel. But today, we need to talk about circumstances where you might be tempted to employ parallelism but it would be incorrect to do so.

For example, look at this sentence:

A New York City ordinance of 1897 regulated the use of bicycles, mandated a maximum speed of eight miles an hour, required cyclists to keep feet on pedals and hands on handlebars at all times, and granted pedestrians right-of-way.

Is everything ok here? Well, it certainly seems so. We have four elements in parallel:

regulated ...

mandated ...

required ...

granted ...

But actually, there is a problem in this sentence:

'regulated...' will not be parallel to the rest of the three elements. The rest of the three elements will be in parallel.

Before we explain why, let's take a simpler example:

The girl sitting next to me wears blue everyday, eats only waffles, and listens to music in office.

The sentence will not be 'The girl sits next to me...' because 'sit' is not parallel to other verbs. "sit" modifies the girl and is not used as a verb here. It is a present participle modifier modifying 'girl'. It specifies the girl about whom we are talking.

Similarly, in the original sentence, 'regulate' is modifying 'ordinance of 1897'. It is telling you which ordinance of 1897.

The other verbs 'mandated', 'required' and 'granted' are used as verbs and are parallel. They are assimilated under 'regulate'. They tell you how the ordinance regulated.

How did it regulate?

mandated ...

required ...

granted ...

Hence, you cannot use 'regulated' here. You must use 'regulating' – the present participle modifier to modify the ordinance. So you have to think logically – are

the items in the given list actually parallel? Are they equal elements? If yes, then they need to be grammatically parallel too; else not.

Here is the complete official question:

Question: A New York City ordinance of 1897 regulated the use of bicycles, mandated a maximum speed of eight miles an hour, required of cyclists to keep feet on pedals and hands on handlebars at all times, and it granted pedestrians right-of-way.

(A) regulated the use of bicycles, mandated a maximum speed of eight miles an hour, required of cyclists to keep feet on pedals and hands on handlebars at all times, and it granted

(B) regulated the use of bicycles, mandated a maximum speed of eight miles an hour, required cyclists to keep feet on pedals and hands on handlebars at all times, granting

(C) regulating the use of bicycles mandated a maximum speed of eight miles an hour, required cyclists that they keep feet on pedals and hands on handlebars at all times, and it granted

(D) regulating the use of bicycles, mandating a maximum speed of eight miles an hour, requiring of cyclists that they keep feet on pedals and hands on handlebars at all times, and granted

(E) regulating the use of bicycles mandated a maximum speed of eight miles an hour, required cyclists to keep feet on pedals and hands on handlebars at all times, and granted

Solution:

From our above discussion, we know that we have choose one of (C), and (E).

(A), (B) and (D) put regulate parallel to the other verbs.

Still, let's point out all the errors of these options:

(A) regulated the use of bicycles, mandated a maximum speed of eight miles an hour, required of cyclists to keep feet on pedals and hands on handlebars at all times, and it granted

Parallelism problem – regulated cannot be parallel to mandated and other verbs. Also, 'mandated' is not parallel to 'it granted'. Besides, 'required of X to do Y' is unidiomatic.

(B) regulated the use of bicycles, mandated a maximum speed of eight miles an hour, required cyclists to keep feet on pedals and hands on handlebars at all times, granting

Parallelism problem – ‘regulated’ is parallel to ‘mandated’ though it should not be. ‘granting’ is not parallel to ‘mandated’ and ‘required’ though it needs to be parallel.

You also need an ‘and’ before the last element of the list ‘and granted ...’

(D) regulating the use of bicycles, mandating a maximum speed of eight miles an hour, requiring of cyclists that they keep feet on pedals and hands on handlebars at all times, and granted

This is not a valid sentence because the main clause does not have a verb. ‘regulating...’, ‘mandating...’ and ‘requiring...’ are the present participle modifiers.

‘granted...’ is not parallel to the other elements. Besides, ‘requiring of X that they do Y’ is unidiomatic.

Now let’s look at the leftover options:

(C) regulating the use of bicycles mandated a maximum speed of eight miles an

hour, required cyclists that they keep feet on pedals and hands on handlebars

at all times, and it granted

'it granted' is not parallel to the other verbs. Besides, 'required X that they do Y' is unidiomatic.

(E) regulating the use of bicycles mandated a maximum speed of eight miles an

hour, required cyclists to keep feet on pedals and hands on handlebars at all

times, and granted

Perfect! All issues sorted out!

Answer (E)

## Complexities of Parallelism – Part I

Parallelism is one of the most common errors tested on GMAT, and debatably, one of the most tricky too! At times, due to the complexity of the sentence, we may not realise that elements should be in parallel; at others we may not realise that they should NOT be in parallel! (discussed in [a previous post](#))

We see parallelism in many cases in GMAT. Some of them are:

- A list of elements
- Co-ordinating and correlative conjunctions such as “and”, “but”, “both ... and...”, “either ... or...” etc
- Stating a comparison such as “compared to A, B”

- Idioms involving elements in parallel such as “consider A B”

On the face of it, it seems quite simple and straight forward – all acting verbs or all nouns etc, but if a GMAT question focusses on it, it is bound to be more complicated than that. Parallelism depends on both, the form and the function of the words. Also, it is important to decipher the logic of the sentence – should the elements be in parallel in the first place? If yes, then which elements should be in parallel?

We also need to worry about when to repeat a particular word in all parallel elements and when not to. We know the thumb rule – either repeat in all or use only once in the beginning. But when is it a good idea to repeat the word in all elements?

Yes, it isn't that simple after all!

But let's answer all these questions using a couple of examples.

*Question 1: It is no surprise that Riyadh, the Saudi capital where people revere birds of prey and ride camels regularly, is home to the world's largest hospital for falcons, a place where falcons from all over the world are treated in operating rooms, an ophthalmology department, and a pox area, and to the largest veterinary clinic for desert mammals, a place where camels and other desert species are expertly cared for.*

*(A) an ophthalmology department, and a pox area, and to the largest veterinary clinic for desert mammals, a place where camels and other desert species are expertly cared for.*

*(B) an ophthalmology department, a pox area, and the largest veterinary clinic for desert mammals, where camels and other desert species are expertly cared for.*

*(C) an ophthalmology department, to a pox area, and to the largest veterinary clinic for desert mammals, a place where camels and other desert species are expertly cared for.*

*(D) to an ophthalmology department, and to a pox area and the largest veterinary clinic for desert mammals, a place where camels and other desert species are expertly cared for.*

*(E) an ophthalmology department and a pox area, and the largest veterinary clinic for desert mammals, a place where camels and other desert species are expertly cared for.*

Solution: There are lots of commas and lots of different elements in the sentence.

Logically, we see that Riyadh is home to the largest hospital for falcons and to the veterinary clinic for desert mammals. It can't be home to operating rooms, an ophthalmology department, and a pox area! These are places inside a hospital!

So then, here is the structure of the sentence:

It is no surprise that Riyadh, ..., is home to A and to B.

A and B should be in parallel.

Within A, we have a list of elements too.

A – the world’s largest hospital for falcons, a place where falcons from all over the world are treated in X, Y and Z

X – operating rooms

Y – an ophthalmology department

Z – a pox area

B – the largest veterinary clinic for desert mammals, a place where camels and other desert species are expertly cared for

Therefore, to show parallelism between A and B, we have used “to” with both to show the beginning of the parallel elements. This separates them from the other set of parallel elements – X, Y and Z.

Note that only option (A) satisfies these conditions and hence is the correct answer here.

### Takeaways

- The first thing to do is to figure out the logic of the sentence to see which elements should be in parallel and which shouldn't.

- After that, put those that need to be in parallel. We might need to repeat certain words to signal the start of parallel elements when we have other intertwined lists too.

We will leave you with a question now. We will discuss it in detail in our next post.

Question 2: Geologists believe that the warning signs for a major earthquake may include sudden fluctuations in local seismic activity, tilting and other deformations of the Earth's crust, changing the measured strain across a fault zone, and varying the electrical properties of underground rocks.

(A) changing the measured strain across a fault zone, and varying

(B) changing measurements of the strain across a fault zone, and varying

(C) changing the strain as measured across a fault zone, and variations of

(D) changes in the measured strain across a fault zone, and variations in

(E) changes in measurements of the strain across a fault zone, and variations among

## Attacking Gerunds on the GMAT!

A few weeks back, we talked about [participles](#) and how they are used on the GMAT. In that post, we had promised to discuss gerunds more in depth at

another time. So today, as promised, we'll be looking at gerunds. Before we do that, however, let's examine Verbals.

A Verbal is a verb that acts as a different part of speech – not as a verb.

There are three types of verbals:

- Infinitives – these take the form of “to + verb”
- Gerunds – these are the “-ing” form of the verb
- Participles – these can take the “-ing,” “-ed,” “-en” etc. forms

Gerunds end in “-ing” and act as nouns in the sentence. They can act as a subject, direct object, subject complement or object of a preposition. For example:

*Running a marathon is very difficult.* – Subject

*I love swimming.* – Direct object

*The activity I enjoy the most is swimming.* – Subject complement

*She thanked me for helping her.* – Object of a preposition

You don't have to identify the part of speech the gerund represents in a sentence; you just need to identify whether a verb's “-ing” form is being used as a gerund and evaluate whether it is being used correctly.

A sentence could also use a gerund phrase that begins with a gerund, such as, “Swimming in the morning is exhilarating.”

Let’s take a look at a couple of official questions now:

*A recent study has found that within the past few years, many doctors had elected early retirement rather than face the threats of lawsuits and the rising costs of malpractice insurance.*

*(A) had elected early retirement rather than face*

*(B) had elected early retirement instead of facing*

*(C) have elected retiring early instead of facing*

*(D) have elected to retire early rather than facing*

*(E) have elected to retire early rather than face*

Upon reading the original sentence, we see that there is a gerund phrase here – “rising costs of malpractice insurance” – which is parallel to the noun “threat of lawsuits.”

The two are logically parallel too, since there are two aspects that the doctors do not want to face: rising costs and the threat of lawsuits.

Note, however, that they are not logically parallel to “face.” Hence, the use of the form “facing” would not be correct, since it would put “facing” and “rising” in parallel. So answer choices B, C and D are incorrect.

Actually, “retire” and “face” are logically parallel so they should be grammatically parallel, too. Answer choice E has the two in parallel in infinitive form – to retire and (to is implied here) face are in parallel.

Obviously, there are other decision points to take note of here, mainly the question of “had elected” vs. “have elected.” The use of “had elected” will not be correct here, since we are not discussing two actions in the past occurring at different times. Therefore, the correct answer is E.

Take a look at one more:

*In virtually all types of tissue in every animal species dioxin induces the production of enzymes that are the organism’s trying to metabolize, or render harmless, the chemical that is irritating it.*

*(A) trying to metabolize, or render harmless, the chemical that is irritating it*

*(B) trying that it metabolize, or render harmless, the chemical irritant*

*(C) attempt to try to metabolize, or render harmless, such a chemical irritant*

*(D) attempt to try and metabolize, or render harmless, the chemical irritating it*

*(E) attempt to metabolize, or render harmless, the chemical irritant*

Notice the use of the gerund “trying” in answer choice A. “Organism’s” is in possessive form and acts as an adjective for the noun verbal “trying.” Usually, with possessives, a gerund does not work. We need to use a noun only. With this in mind, answer choices A and B will not work.

The other three options replace “trying” with “attempt” and hence correct this error, however options C and D use the redundant “attempt to try.” The use of “attempt” means “try,” so there is no need to use both. Option E corrects this problem, so it is our correct answer.

Unlike participles, which can be a bit confusing, gerunds are relatively easy to understand and use. Feeling more confident about them now?

## Understanding Participles on the GMAT

There is a lot of confusion surrounding the topic of Participles so let’s take a look at it today.

Quite simply, participles are words formed from verbs which can be used as describing words (on the other hand, gerunds are verbs used as nouns, but that is a topic for another day!).

There are two types of participles:

1. The Past Participle – usually ends in -ed, -d, -t, -en, or -n

For Example: chosen, danced, known, sung etc

## 2. The Present Participle – ends in –ing

For Example: choosing, dancing, knowing, singing etc

These participles often start the participle phrases used to describe nouns/noun phrases/entire sentences. The participial phrases are underlined in the examples given below.

Examples:

I want to stand next to the girl wearing the yellow dress.

Standing next to the tall gentleman, she looked petite.

Battered by hail, the car collapsed.

The most important crop of this region is rice, sown in the month of June and harvested in October.

Here is how participle phrases are usually used:

**Present Participle Phrases** (the underlined parts of the sentences are participial phrases):

1. At the beginning of a sentence followed by a comma and then a clause (present participle phrase + comma + clause) – In this case, the participle phrase could modify the subject of the clause or the entire clause.

Examples:

Wagging its tail, my dog ran up to me. (modifies 'my dog')

Silencing the students, the principal stepped on to the podium. (modifies the entire clause because the principal silenced the students by stepping on to the podium)

2. At the end of a sentence separated from the clause using a comma (clause + comma + present participle phrase) – In this case, the participle phrase modifies the entire preceding sentence.

Example: The principal stepped on to the podium, silencing the students. (modifies the entire preceding clause)

3. Following a noun without a comma – In this case, the participle phrase modifies the noun.

Example: I want to stand next to the girl wearing the yellow dress. (modifies 'the girl')

**Past Participle Phrases** (the underlined parts of the sentences are participial phrases):

1. Following a noun separated by a comma (noun + comma + past participle phrase) – In this case, the participle phrase modifies the noun.

Example: The most important crop of this region is rice, sown in the month of June and harvested in October . (modifies 'rice')

2. At the beginning of a sentence followed by a comma and then a clause (past participle phrase + comma + clause) – In this case, the participle phrase modifies the subject of the clause.

Example: Battered by hail, the car collapsed. (modifies 'the car')

Next week, we will take some questions to show the classic usage of participle modifiers in GMAT. But today we need to move on and discuss an important point regarding the rules discussed.

Important Note: In regular English grammar, a past participle phrase following a clause and separated by a comma (clause + comma + past participle phrase) could modify the entire preceding clause. But GMAT is not very keen on this usage; so avoid it. That said, remember that studying grammar rules in isolation is worthless. If the sentence demands such a construction, then it is correct to use it. We cannot explain this point without a question so let's take one from our own collection.

**Question:** Due to the slow-moving nature of tectonic plate movement, the oldest ocean crust is thought to date from the Jurassic period, formed from huge fragments of the Earth's lithosphere and lasted 200 million years.

(A) formed from huge fragments of the Earth's lithosphere and lasted 200 million years.

(B) forming from huge fragments of the Earth's lithosphere and lasting 200 million years.

(C) forming from huge fragments of the Earth's lithosphere and lasted 200 million years.

(D) formed from huge fragments of the Earth's lithosphere and lasting 200 million years.

(E) formed from huge fragments of the Earth's lithosphere and has been lasting 200 million years.

Here is our official solution:

*The correct response is (D).*

*The meaning of the sentence is that the "oldest ocean crust" was "formed" in the past during the Jurassic period and is currently still "lasting" (since if it's the "oldest" it must still be around!). We need the past tense/participle verbs to be used correctly.*

*If you chose (A), the ocean crust was "formed" in the past" but if "lasted" is past tense then the oldest ocean crust is no longer around, which would mean it couldn't be the "oldest."*

*If you chose (B) or (C), "forming" implies the crust is still being formed. While it's true the Earth's crust is constantly in flux, we're concerned with the "oldest ocean*

*crust” – that part that is no longer continuing to form, but was formed at some point during the Jurassic period.*

*If you chose (E), you correctly used “formed,” however the present perfect “has been lasting” is unnecessarily wordy. The simple participle verb form will suffice.*

Does logic dictate that (D) is the correct answer? Yes. Will you ignore it because it uses past participle form modifying the previous subject/clause instead of ‘Jurassic Period’? No. Note that it is correct grammatically and you should know it. Whatever we can infer about the preferences of GMAT is from the questions it gives. GMAT doesn’t clarify its stand on every grammatical issue and the stand is probably flexible depending on the sentence under examination. So you need to be flexible in your understanding of what is and is not acceptable in GMAT. Use logic – remember, GMAT is a test of your reasoning skills. Get to the best answer under given circumstances.

## To Learn To-Infinitives

In our previous posts, we have discussed two types of Verbals (a verb that acts as a different part of speech) – [Gerunds](#) and [Participles](#). Today we will take a look at the third type – to-Infinitives

Note that the infinitive is the base form of a verb. The infinitive has two forms:

- **the to-infinitive** = to + base
- **the zero infinitive** = base

We will discuss the to-infinitive form, a verbal. It can work as a noun, an adjective, or an adverb

The to-infinitive form is used in many sentence constructions, often expressing the purpose of something or someone's opinion about something. The to-infinitive is used following a large collection of different verbs as well such as afford, offer, refuse, prepare, undertake, proceed, propose, promise etc

The function of a to-infinitive in a sentence could be any of the following:

I. To show the purpose of an action: In this case “*to*” has the same meaning as “*in order to*” or “*so as to*”. It follows a verb in this case.

For Example: She has gone to complete her homework.

II. To indicate what something can or will be used for: It follows a noun or a pronoun in this case.

For Example: I don't have anything to wear. This is the right thing to do.

III. After adjectives

For Example: I am happy to be here.

IV. The subject of the sentence

For Example: To visit Paris is my lifelong dream.

V. With adverbs: It is used with the adverbs *too* and *enough* to express the reasoning behind our satisfaction or dissatisfaction. The pattern is that *too* and *enough* are placed before or after the adjective, adverb, or noun that they modify in the same way they would be without the to-infinitive. We then follow them by the to-infinitive to explain the reason why the quantity is excessive, sufficient, or insufficient.

For Example: He has too many books to carry on his own.

VI. With question words: The verbs ask, decide, explain, forget, know, show, tell, & understand can be followed by a question word such as where, how, what, who, & when + the to-infinitive.

For Example: I am not sure how to use the new washing machine.

We are likely to see infinitive phrases in GMAT sentence correction questions. An infinitive phrase is made up of the infinitive verb with its object and modifiers.

Let's take a look at how we could see an infinitive in a GMAT question.

*Question: Twenty-two feet long and 10 feet in diameter, the AM-1 is one of the many new satellites that is a part of 15 years effort of subjecting the interactions of Earth's atmosphere, oceans, and land surfaces to detailed scrutiny from space.*

*(A) satellites that is a part of 15 years effort of subjecting the interactions of Earth's atmosphere, oceans, and land surfaces*

*(B) satellites, which is a part of a 15-year effort to subject how Earth's atmosphere, oceans, and land surfaces interact*

*(C) satellites, part of 15 years effort of subjecting how Earth's atmosphere, oceans, and land surfaces are interacting*

*(D) satellites that are part of an effort for 15 years that has subjected the interactions of Earth's atmosphere, oceans, and land surfaces*

*(E) satellites that are part of a 15-year effort to subject the interactions of Earth's atmosphere, ocean, and land surfaces*

Solution:

First let's try to understand the basic structure of the sentence.

... AM-1 is one of the many new satellites "that/which clause"

"that/which clause" modifies the noun "satellites" in four of the given five options. Note that "satellites" is plural so we need to use the verb "are". So options (A) and (B) are out.

(C) is also incorrect. It looks like "part of 15 years ... from space" is a bad attempt at writing an absolute phrase. [Absolute phrases](#) modify the entire clause but here we need to modify "satellites" only. Satellites are a part of a 15 year effort to subject A to detailed scrutiny and hence we should use a that/which clause.

(D) is incorrect too. It uses another “that clause” – that has subjected the interactions ...

This “that clause” modifies the noun “effort”, not “15 years”. The effort has subjected A to detailed scrutiny.

There is a better way of writing this sentence such that the “that clause” comes immediately after “effort”

(E) is correct. Note how it uses the infinitive form immediately after the noun “effort” to indicate how the effort is being used. It is being used to subject A to detailed scrutiny.

Hope now you will be able to recognise the different verbals and use them correctly.

## Planning for the “Plan” Questions on the GMAT Critical Reasoning Section

At Veritas Prep, we are often asked to discuss how to handle the “plan” Critical Reasoning questions test takers are asked on the GMAT. Here is how these questions are different from your regular strengthen/weaken questions – instead of a conclusion, we are given situations and plans to remedy a particular problem. We are then asked to evaluate the success of the plan or identify a weakness in the plan or an assumption of the plan.

Note that a plan question is very similar to a strengthen/weaken/assumption question. The main difference between them is that instead of being given a conclusion, you are asked to strengthen/weaken the possibility of a plan working out or an assumption made in the plan (looking at a few example questions will make this clearer). Let's look at some examples of each of the three types of "plan" questions you are likely to come across on the GMAT exam:

**Example 1 (the most common one): Which of the following will help us in evaluating the success of the plan?**

*In the country of Bedenia, officials have recently implemented a new healthcare initiative to reduce dangerous wait times at emergency rooms in the country's hospitals. This initiative increases the number of available emergency nurses and doctors in urban settings: scholarships and no-interest loans are being offered to prospective students in these fields if they work in major city hospitals, relocation packages to urban centers are being offered for current emergency practitioners, and immigration rules are being changed to enable foreign emergency doctors and nurses to more easily move to Bedenia's major cities.*

*Which of the following would be most important to determine in assessing whether the initiative will be successful?*

*(A) What percentage of current nurses and doctors work in emergency medicine.*

*(B) Which hospitals in Bedenia have dangerous wait times in their emergency rooms.*

*(C) Whether a career in emergency medicine pays substantially less than other types of medicine.*

*(D) Whether wait times could be reduced by means other than increasing the number of available nurses and doctors.*

*(E) Whether many foreign doctors and nurses are currently not allowed to enter Bedenia.*

Plan: Reduce the dangerous wait time by increasing the availability of emergency nurses and doctors in urban settings by providing scholarships, offering relocation packages and changing immigration rules.

We need to find out whether this given plan will actually reduce wait time. Note that we are not worried about what else could reduce the dangerous wait time or what else this plan could do. The only point of concern for us is whether this plan will reduce the wait time.

This plan intends to increase the availability of emergency nurses and doctors in urban settings, so ask yourself this question: is this actually what is required? Do the urban hospitals have dangerous wait times? What if only rural hospitals have wait times and that is where the impetus is required? Answer choice B addresses exactly this question and, hence, will allow us to determine whether or not the initiative will be successful. Therefore, the answer is B.

Now look at our second example:

**Example 2: Which of the following provides an argument against the plan?**

*In the last two years alone, nearly a dozen of Central University's most prominent professors have been lured away by the higher salaries offered by competing academic institutions. In order to protect the school's ranking, Central University's president has proposed increasing tuition by 10% and using the extra money to offer more attractive compensation packages to the most talented and well-known members of its faculty.*

*Which of the following provides the most persuasive argument against the university president's proposed course of action?*

*(A) It is inevitable that at least some members of the faculty will ultimately take jobs at other universities, regardless of how much Central University offers to pay them.*

*(B) Other universities are also looking for ways to provide higher salaries to prominent members of the faculty.*

*(C) Central University slipped in the last year's ranking of regional schools.*

*(D) The single most important factor in ranking a university is its racial and socioeconomic diversity.*

*(E) The president of Central University has only been in office for 18 months and has never managed such a large enterprise.*

Plan: Protect the school's ranking by retaining its most prominent members by increasing their compensation.

We need to find a persuasive argument against the given plan – something that leads us to believe the plan should not be implemented. Here, test takers often become confused between options B and D. Let's break down each answer choice in detail to determine which one is correct:

*(B) Other universities are also looking for ways to provide higher salaries to prominent members of the faculty.*

This option supports the given plan. It is a reason to actually implement the plan since if more disparity gets created, more prominent professors will leave. Remember, we are looking for an option that is against the plan, so B cannot be our answer.

*(D) The single most important factor in ranking a university is its racial and socioeconomic diversity.*

This is an argument against the plan. It states that the single most important factor in ranking is “racial and socioeconomic diversity,” so trying to retain prominent professors is not likely to retain ranking. Hence, the correct answer would be D.

Now let's look at our final example:

**Example 3: Which of the following is an assumption of the plan?**

*The general availability of high-quality electronic scanners and color printers for computers has made the counterfeiting of checks much easier. In order to deter such counterfeiting, several banks plan to issue to their corporate customers checks that contain dots too small to be accurately duplicated by any electronic*

*scanner currently available; when such checks are scanned and printed, the dots seem to blend together in such a way that the word "VOID" appears on the check.*

*A questionable assumption of the plan is that*

*(A) in the territory served by the banks the proportion of counterfeit checks that are made using electronic scanners has remained approximately constant over the past few years.*

*(B) most counterfeiters who use electronic scanners counterfeit checks only for relatively large amounts of money.*

*(C) the smallest dots on the proposed checks cannot be distinguished visually except under strong magnification.*

*(D) most corporations served by these banks will not have to pay more for the new checks than for traditional checks.*

*(E) the size of the smallest dots that generally available electronic scanners are able to reproduce accurately will not decrease significantly in the near future.*

Plan: To deter counterfeiting, issue checks that contain dots too small to be accurately duplicated (which will form the word VOID) by any electronic scanner currently available.

We need to find an assumption that this given plan makes. Note that the plan is based on the capabilities of the currently available scanners and assumes that their capabilities will not improve in the near future. Hence, E is an assumption.

Some test takers get confused with answer choice C:

*(C) the smallest dots on the proposed checks cannot be distinguished visually except under strong magnification*

This option is actually not an assumption. Even if the dots can be distinguished visually, they don't form the word VOID. Only when current scanners scan the checks and then we print them do the dots merge to form the word. Thus, our answer is E.

We hope you have understood how to handle various "plan" questions on the GMAT. The most important aspect of such questions to remember is to first identify the plan and what one hopes to achieve through it.

## The Importance of Context in Verb Tenses

In our last post, we looked at verb tenses and noted that there is no restriction on how many tenses we can use and mix within a sentence, as long as they are appropriate for the context of the sentence. The problem is that sometimes the context can be a bit complicated to crack. We may think that a tense shift is required when it is actually not.

Let's take a look at an official GMAT question to better understand this concept:

*A recent study has found that within the past few years, many doctors had elected early retirement rather than face the threats of lawsuits and the rising costs of malpractice insurance.*

*(A) had elected early retirement rather than face*

*(B) had elected early retirement instead of facing*

*(C) have elected retiring early instead of facing*

*(D) have elected to retire early rather than facing*

*(E) have elected to retire early rather than face*

So the first decision point is “have” vs. “had”. What is correct here? We know that we use past perfect tense when there are two actions in the past. So do we have two actions in the past here – “finding” and “electing” – of which, it may seem, “electing” would have happened before “finding?” Sure, we have two actions but here is the catch – we use past perfect only when the previous action takes place completely before the recent past action. Here, we know that “within the past few years” implies the recent years. The study shows that most probably, doctors are still electing early retirement. So the use of past perfect is incorrect here. In this context, we will use present perfect only.

The other error that helps us to arrive at the right answer is lack of parallelism. “retire” and “face” need to be parallel while rising should not be parallel to them because it is a sub-list under “face”.

They elected to retire ... rather than face A and B.

A – the threats

B – the rising costs

“[R]ising” is a present participle that is modifying the noun “costs” in the non underlined part. So our verbs “retire” and “face” should not be in the -ing form. Answer choice E satisfies all these criteria and hence is the right answer.

Note that the correct answer uses present perfect for both verbs since the context requires us to.

Let’s look at a rewrite of this question:

*A recent article in The Economic Times reported that many recent MBA graduates had decided on taking a job rather than face the uncertainty of entrepreneurship.*

*(A) had decided on taking a job rather than face*

*(B) had decided on taking a job instead of facing*

*(C) have decided to take a job instead of facing*

*(D) had decided to take a job rather than facing*

*(E) have decided to take a job rather than face*

How does the solution change now? Again we have two verbs “report” and “decide”. The reporting has already happened so the simple past “reported” has been used in the non-underlined part. Which tense will we use with “decide”? Again, the concept is still the same. We are talking about recent MBA graduates and it shows a trend. It is something that is not completely over, hence the use of past perfect is not justified. We should use the present perfect tense only though it may seem a bit counterintuitive since “report” is in the past tense.

“take” and “face” should be parallel to each other so out of (C) and (E), (E) fits. This is the reason making sweeping statements in grammar is dangerous – a lot depends on the context.

## Is It Incorrect to Use Multiple Verb Tenses in a Sentence?

Some GMAT test-takers wonder whether it is grammatically correct to use multiple tenses in a single sentence. Today we will discuss the cases in which mixing verb tenses is acceptable and those in which this is not. The bottom line is this: there is no restriction on what tenses we can use and mix within a sentence, as long as they are appropriate for the context.

Take a look at this example sentence featuring multiple different verb tenses:

*I have heard that Mona left Manchester this morning, and has already arrived in London, where she will be for the next three weeks.*

Here, we have present perfect tense, simple past tense and simple future tense all in the same sentence. We're mixing different tenses, but they all make sense together to create a logical sequence of events.

The confusion over using multiple verb tenses in one sentence probably arises because we have heard that we need to maintain verb tense consistency. These two things are different.

Tense Consistency – We do not switch one tense to another unless the timing of the action demands that we do. We do not switch tenses when there is no time change for the actions.

Pay particular attention to the “unless” clause in that description – maintaining consistency of a single verb tense is not an absolute virtue! Verb tenses need to convey a logical timeline or sequence of events, so if there is a shift in the timeline of when events occurred, your job isn't to preserve verb tense consistency at all costs, but rather to mix verb tenses as necessary to tell a logical story of how and when things happened.

Let's take a look at some examples to understand this:

Example 1: During the match, my dad **stood** up and **waved** at me.

These two actions (“stood” and “waved”) happen at the same time and hence, need to have the same tense. This sentence could take place in the present or future tense too, but both verbs will still need to take on the same tense. For example:

Example 2: During my matches, my dad **stands** up and **waves** at me.

Example 3: During the match tomorrow, my dad **will stand** up and **wave** at me.

On the other hand, a sentence such as...

Example 4: During the match, my dad **stood** up and **waves** at me.

This sentence is grammatically incorrect. Since both actions (“stood” and “waves”) happen at the same time, we need them to be in the same tense, as shown in the variations of this sentence above. Consider this case, however:

Example 5: My dad **reached** for the sandwich after he had already **eaten** a whole pizza.

Here, the two actions (“reached” and “eaten”) happen at different times in the past, so we use both the simple past and past perfect tenses. The shift in tense is correct in this context, and that mixing tenses is necessary to convey a logical sequence of events.

**Takeaway: The tenses of verbs in a sentence must be consistent when the actions happen at the same time. When dealing with actions that occur at different points in time, however, we can – and probably should – use multiple tenses in the same sentence.**

Let’s look at an official GMAT question now to see how multiple tenses can be a part of the same sentence:

*For the farmer who takes care to keep them cool, providing them with high-energy feed, and milking them regularly, Holstein cows are producing an average of 2,275 gallons of milk each per year.*

*(A) providing them with high-energy feed, and milking them regularly, Holstein cows are producing*

*(B) providing them with high-energy feed, and milked regularly, the Holstein cow produces*

*(C) provided with high-energy feed, and milking them regularly, Holstein cows are producing*

*(D) provided with high-energy feed, and milked regularly, the Holstein cow produces*

*(E) provided with high-energy feed, and milked regularly, Holstein cows will produce*

This is a very tricky question. Let's first shortlist our options based on the obvious errors.

The non-underlined part of the sentence uses the pronoun "them" to refer to the cows, so using "the Holstein cow" (singular) as the antecedent will be incorrect. The antecedent must be "Holstein cows" (plural) – this means answer choices B and D are out.

Also, we know for sure that “provide” and “milk” are parallel elements in the sentence, so they should take the same verb tense. Hence, answer choice C is also out.

Let’s look at A now. If we assume this option is correct, “providing” and “milking” act as modifiers to “keep them cool”. That certainly does not make sense since “providing with high energy feed” and “milking regularly” are not ways of keeping cows cool.

This means the correct answer is E, but we need to see how.

*For the farmer who takes care to keep them cool, provided with high-energy feed, and milked regularly, Holstein cows will produce an average of 2,275 gallons of milk each per year.*

Let’s break down the sentence:

*For the farmer who takes care to keep them...*

- cool,
- provided with high-energy feed,
- milked regularly,

*...Holstein cows will produce an average of 2,275 gallons of milk each per year.*

Note that we’re mixing two different tenses here: “For the farmer who takes care...” and “cows will produce...”. The word “takes” is the present tense while “will produce” is the future, but that does not make this sentence incorrect. The context of the author could very well justify the use of the future tense. Perhaps

the farmers have obtained Holstein cows recently, and hence, will see the produce of 2,275 gallons in the future, only.

A shift in the tense certainly doesn't make the sentence incorrect. When you're presented with multiple verbs in various tenses in a problem, check to determine whether the verbs convey a logical sequence of events. If a sentence covers a broad timeline, your goal isn't to avoid mixing tenses, but instead to ensure that the tenses used properly reflect that timeline.

## Using “Few” vs. “A Few” vs. “Quite a Few” in a GMAT Verbal Question

On quite a few occasions, we at Veritas Prep find ourselves explaining the difference between the terms “few” and “a few” – a subtle, but very important distinction which has, on occasion, completely changed the meaning of a sentence. Hence, we realized that a post on this difference is warranted.

“*Few*”, when used without a preceding “a”, means “very few” or “none at all”. “*Few*” is a negative, which puts the quantity of what you are describing near zero.

On the other hand, “*a few*” is used to indicate “not a large number”. “*A few*” also indicates a small approximate number, but it is positive nonetheless.

The difference between the two is subtle, yet there are instances where the two can mean completely opposite things. For example, “I have a few friends” is the same as saying “I have some friends”. “I have few friends”, however, implies that

I have *only* very few friends (as opposed to many). It can also imply that I don't feel very well about it, and I wish I had more friends.

Also, note that there is a very common expression, "quite a few", which looks like it could mean "rather few" or "very few", but it does not. It actually means the exact opposite: "a large or significant number" or "many". So saying, "I have quite a few friends," is the same as saying "I have quite a lot of friends".

Here are a few other simple examples:

- A few people think that red wine is healthy.
  - This implies some people think that red wine is healthy.
- Few people think that red wine is healthy.
  - This implies only very few people, a very small number, think that red wine is healthy; most think that it is not.
- Quite a few people think that red wine is healthy.
  - This implies many people, a large number, think that red wine is healthy.

Let's examine an official Critical Reasoning question in which confusion among these terms could lead to an incorrect answer:

*Until now, only injectable vaccines against influenza have been available. They have been primarily used by older adults who are at risk for complications from influenza. A new vaccine administered in a nasal spray form has proven effective in preventing influenza in children. Since children are significantly more likely than adults to contract and spread influenza, making the new vaccine widely*

*available for children will greatly reduce the spread of influenza across the population.*

*Which of the following, if true, most strengthens the argument?*

*(A) If a person receives both the nasal spray and the injectable vaccine, they do not interfere with each other.*

*(B) The new vaccine uses the same mechanism to ward off influenza as injectable vaccines do.*

*(C) Government subsidies have kept the injectable vaccines affordable for adults.*

*(D) Of the older adults who contract influenza, relatively few contract it from children with influenza.*

*(E) Many parents would be more inclined to have their children vaccinated against influenza if it did not involve an injection.*

Let's break down the argument of this passage first. We are given following premises:

- Until now, only injections of the influenza vaccine were available.
- These injections were primarily used by older adults.
- Now nasal sprays are available that prevent influenza in children.
- Children are more likely to contract and spread influenza.
- Conclusion: If nasal sprays are made available for children, it will greatly reduce the spread of influenza across the population.

Does something come to mind when you read this conclusion? What initially came to my mind was that if children are most likely to contract and spread influenza, they should have just been given the injections and that would have prevented the spread of disease across the population. Why is it that the availability of a nasal spray will prevent the spread of influenza but injections have not been able to do this?

We need to strengthen the argument, so we should focus on our conclusion and find out what will strengthen it the most. Let's go through each of the answer choices:

*(A) If a person receives both the nasal spray and the injectable vaccine, they do not interfere with each other.*

If a person has already been given an injection, he or she is immune to influenza – taking the nasal spray on top of this will not have any impact on his or her immunity. This option is irrelevant to the argument, thus A cannot be our answer.

*(B) The new vaccine uses the same mechanism to ward off influenza as injectable vaccines do.*

This answer choice only says that the nasal sprays work in the same way the injections do. We are not told exactly why injections could not prevent the spread of influenza while the nasal spray will, so this option is also not correct.

*(C) Government subsidies have kept the injectable vaccines affordable for adults.*

This option tells us that the subsidies have kept injections affordable for all older adults, but it doesn't say anything about the cost of the nasal spray. If, instead,

this option stated, “Injections are very expensive but nasal spray is a cheap alternative”, it might have made a stronger contender, however we do not know whether cost is a factor that parents consider at all when getting their children vaccinated (to make this option the correct answer, we might even have to add something like, “Parents are not willing to get their kids immunized if the vaccine is very expensive”). As is, however, this answer choice is not correct.

*(D) Of the older adults who contract influenza, relatively few contract it from children with influenza.*

Here is the trick – many test takers feel that this option is like an assumption, and hence, it certainly strengthens the conclusion. “Few” is assumed to be “some”, so it seems to them that this option is saying, “Some older adults do contract influenza from children”. It certainly seems to be an assumption, since that is how the spread of influenza will reduce across the population of older adults.

We know, however, that “few” actually means “hardly any” or “near zero”. If few (near zero) older adults catch flu from children, it doesn’t strengthen the conclusion. If anything, it has the opposite effect since the older adults will be unaffected, and hence, it is unlikely that the spread of influenza will reduce across the population. Because of this, option D is not correct.

*(E) Many parents would be more inclined to have their children vaccinated against influenza if it did not involve an injection.*

Now this is what we are looking for – a reason why parents don’t give influenza shots to their kids but will be willing to give them nasal sprays. Parents don’t like to give shots to their kids (could be due pain associated with a shot or whatever,

the reason why doesn't really matter here), but now that a nasal spray version of the vaccine is available, they will be more inclined to get their kids vaccinated. This will probably help prevent the spread of influenza across the population. The correct answer, therefore, is E.

## Tackling GMAT Critical Reasoning Boldface Questions

For some reason, GMAT test takers automatically associate boldface questions with the 700 level, but this fear is unfounded, honestly!

We have often found that one strategy, which is very helpful in other question types too, helps sort out most questions of this type, though not in the same way. That strategy is – 'find the conclusion(s)'

The conclusion of the argument is the position taken by the author.

Boldface questions (and others too) sometimes have more than one conclusion – One would be the conclusion of the argument i.e. the author's conclusion. The argument could mention another conclusion which could be the conclusion of a certain segment of people/ some scientists/ some researchers/ a politician etc. We need to segregate these two and how each premise supports/opposes the various conclusion. Once this structure is in place, we automatically find the answer. Let's see how with an example.

**Question: Recently, motorists have begun purchasing more and more fuel-efficient economy and hybrid cars that consume fewer gallons of**

**gasoline per mile traveled. There has been debate as to whether we can conclude that these purchases will actually lead to an overall reduction in the total consumption of gasoline across all motorists.**The answer is no, since motorists with more fuel-efficient vehicles are likely to drive more total miles than they did before switching to a more fuel-efficient car, negating the gains from higher fuel-efficiency.

Which of the following best describes the roles of the portions in bold?

(A)The first describes a premise that is accepted as true; the second introduces a conclusion that is opposed by the argument as a whole.

(B)The first states a position taken by the argument; the second introduces a conclusion that is refuted by additional evidence.

(C)The first is evidence that has been used to support a position that the argument as a whole opposes; the second provides information to undermine the force of that evidence.

(D)The first is a conclusion that is later shown to be false; the second is the evidence by which that conclusion is proven false.

(E)The first is a premise that is later shown to be false; the second is a conclusion that is later shown to be false.

**Solution:** As our first step, let's try to figure out the conclusion of the argument:

The author's view is that "purchases of fuel efficient vehicles will NOT lead to an overall reduction in the total consumption of gasoline across all motorists."

This is the position the argument (and author) takes.

The argument gives us another conclusion: these purchases will actually lead to an overall reduction in the total consumption of gasoline across all motorists.

Some people take this position (implied by the use of "there has been debate")

This is our second bold statement. It introduces the opposing conclusion.

Let's look at our options now.

(A) The first describes a premise that is accepted as true; the second introduces a conclusion that is opposed by the argument as a whole.

The first bold statement: Recently, motorists have begun purchasing more and more fuel-efficient economy and hybrid cars that consume fewer gallons of gasoline per mile traveled.

This is a premise and has been accepted as true. We know it has been accepted as true since the last line ends with – "...negating the gains from higher fuel-efficiency"

We have seen above that the second bold statement tells us about a conclusion that the argument opposes.

So (A) is correct. We have found our answer but let's look at the other options too.

(B) The first states a position taken by the argument; the second introduces a conclusion that is refuted by additional evidence.

The first bold statement is a premise. It is not the position taken by the argument. Let's move on.

(C) The first is evidence that has been used to support a position that the argument as a whole opposes; the second provides information to undermine the force of that evidence.

This option often confuses test-takers.

The evidence is – “Recently, motorists have begun purchasing more and more fuel-efficient economy and hybrid cars that consume fewer gallons of gasoline per mile traveled.”

That is, “the motorists have begun purchasing fuel efficient cars that give better mileage.”

The second bold statement does not undermine this evidence at all. In fact, it builds up on it with – “This brings up a debate on whether it will lead to overall decreased fuel consumption?”

Hence (C) is not correct.

(D)The first is a conclusion that is later shown to be false; the second is the evidence by which that conclusion is proven false.

The first bold statement is not a conclusion. So no point dwelling on this option.

(E)The first is a premise that is later shown to be false; the second is a conclusion that is later shown to be false.

The premise is taken to be true. The argument ends with "... the gains from higher fuel-efficiency". Hence, this option doesn't stand a chance either.

We hope you see how easy it is to break down the options once we identify the conclusion(s).

## Beware of Assumption in GMAT Critical Reasoning Options

Sometimes, while evaluating the answer choices in in strengthen/weaken questions, we unknowingly go beyond the options and make assumptions about what they may imply if we were to have additional pieces of data. What we have to remember is that we do not have this additional information – we have to judge each option on its own merits, only. Let's discuss this in detail with one of our own practice GMAT questions:

*In 2009, a private school spent \$200,000 on a building which housed classrooms, offices, and a library. In 2010, the school was unable to turn a profit. Therefore, the principal should be fired.*

*Each of the following, if true, weakens the author's conclusion EXCEPT:*

*(A) The principal was hired primarily for her unique ability to establish a strong sense of community, which many parents cited as a quality that kept children enrolled in the school longer.*

*(B) The new library also features a seating area big enough for all students to participate in cultural arts performances, which the head of school intends to schedule more frequently now.*

*(C) The principal was hired when the construction of the new building was almost completed.*

*(D) A significant number of families left the school in 2010 because a favourite teacher retired.*

*(E) More than half of the new families who joined the school in 2010 cited the beautiful new school facility as an important factor in their selection of the school.*

This is a weaken/exception question, so four of the five answer choices will weaken the argument, while the fifth option (which will be the correct answer) will either not have any impact on the argument or it might even strengthen it. As we know, such questions require a bit more effort to answer, since four of the five options will definitely be relevant to the argument. The important thing is to focus

on what we are given and not assume what the various answer options may or may not lead to. Let's understand this:

The gist of the argument:

- Last year, a lot of money was spent to construct a new building with many amenities.
- This year, the school did not see a profit.
- Hence, fire the principal.

Based on the two given facts – “a lot of money was spent to make the building in 2009” and “the school did not see a profit in 2010” – the author has decided to fire the principal. Many pieces of information could weaken his stance. For example:

- It was not the principal's decision to construct the building.
- The school's revenue in 2010 took a hit because of some other factor.
- The school's losses reduced by a huge amount in 2010 and the probability of it seeing a profit in 2011 is high.

Information such as this could improve the principal's case to stay. We know that for this particular question, there will only be one option that does not help the principal.

You will have to choose the answer choice which, with the given information, does not help the principal's case. Let's look at the options now:

*(A) The principal was hired primarily for her unique ability to establish a strong sense of community, which many parents cited as a quality that kept children enrolled in the school longer.*

With this answer choice, we see that the principal was hired not to increase school profits, but for another critical purpose. Perhaps the school's finance department is in charge of worrying about profits, and so the head of that department needs to be fired! This answer choice makes a strong case for keeping the principal, and hence, weakens the author's argument.

*(B) The new library also features a seating area big enough for all students to participate in cultural arts performances, which the head of school intends to schedule more frequently now.*

If true, this statement would have no impact on whether or not the principal should be fired. It describes an amenity provided by the new building and how it will be used – it neither strengthens nor weakens the principal's case to stay, hence, this is the correct answer choice. But let's look at the rest of the options too, just to be safe:

*(C) The principal was hired when the construction of the new building was almost completed.*

This tells us that the new building was not her decision. So if it did not have the desired effect, she cannot be blamed for it. So it again helps her case.

*(D) A significant number of families left the school in 2010 because a favourite teacher retired.*

This answer choice shows that there was another reason behind the school's loss in profit. The construction of the building could still be a good idea that leads to future profits, which the principal's case and weakens the author's argument.

*(E) More than half of the new families who joined the school in 2010 cited the beautiful new school facility as an important factor in their selection of the school.*

For some reason, this is the answer choice that often trips up students. They feel that it doesn't help the principal's case – that because the new building attracts students, if there are losses, it means that the loss is due to a fault with the new building, and thus, the principal is at fault. But note that we are assuming a lot to arrive at that conclusion. All we are told is that the new building is attracting students. This means the new building is serving its purpose – it is generating extra revenue. The fact that the school is still experiencing losses could be explained by many different reasons.

Since the author's decision to fire the principal is based solely on the premise that a lot of money was spent to construct the new building, which now seems to serve no purpose (because the school experienced losses), this answer choice certainly weakens the argument. The option tells us that the principal's decision to make the building was justified, so it helps her case to stay with the school.

After examining each answer choice, we can see that the answer is clearly B. Remember, in Critical Reasoning questions it is crucial to come to conclusions only based on the facts that are given – creating assumptions based on information that is not given can lead you to fall in a Testmaker trap.

# How to Answer GMAT Questions That are About an Unfamiliar Topic

Usually, GMAT questions that are based on your field of work or interests are simple to comprehend and relatively easy to answer correctly. But what happens when, say, an engineer gets a question based on psychiatry? Is he or she bound to fail? No.

Remember that the GMAT offers a level playing field for test takers from different backgrounds – it doesn't matter whether your major was literature or physics. If you feel lost on a question about renaissance painters, remember that the guy next to you is lost on the problem involving planetary systems.

So how can you successfully handle GMAT questions on any topic? By sticking to the basics. The logic and reasoning required to answer these questions will stay the same no matter which field the information in the question stem comes from.

To give an example of this, let's today take a look at a GMAT question involving psychoanalysis:

*Studies in restaurants show that the tips left by customers who pay their bill in cash tend to be larger when the bill is presented on a tray that bears a credit-card logo. Consumer psychologists hypothesize that simply seeing a credit-card logo makes many credit-card holders willing to spend more because it reminds them that their spending power exceeds the cash they have immediately available.*

*Which of the following, if true, most strongly supports the psychologists' interpretation of the studies?*

*(A) The effect noted in the studies is not limited to patrons who have credit cards.*

*(B) Patrons who are under financial pressure from their credit-card obligations tend to tip less when presented with a restaurant bill on a tray with credit-card logo than when the tray has no logo.*

*(C) In virtually all of the cases in the studies, the patrons who paid bills in cash did not possess credit cards.*

*(D) In general, restaurant patrons who pay their bills in cash leave larger tips than do those who pay by credit card.*

*(E) The percentage of restaurant bills paid with given brand of credit card increases when that credit card's logo is displayed on the tray with which the bill is prepared.*

Let's break down the argument:

Argument: Studies show that cash tips left by customers are larger when the bill is presented on a tray that bears a credit-card logo.

Why would that be? Why would there be a difference in customer behavior when the tray has no logo from when the tray has a credit card logo? Psychologists' hypothesize that seeing a credit-card logo reminds people of the spending power

given by the credit card they carry (and that their spending power exceeds the actual cash they have right now).

The question asks us to support the psychologists' interpretation. And what is the psychologists' interpretation of the studies? It is that seeing a logo reminds people of their own credit card status. Say we change the argument a little by adding a line:

*Argument:* Studies show that cash tips left by customers are larger when the bill is presented on a tray that bears a credit-card logo. *Patrons under financial pressure from credit-card obligations tend to tip less when presented with a restaurant bill on a tray with credit-card logo than when the tray has no logo.*

Now, does the psychologists' interpretation make even more sense? The psychologists' interpretation is only that "seeing a logo reminds people of their own credit card status." The fact "that their spending power exceeds the cash they have right now" explains the higher tips. If we are given that some customers tip more upon seeing that card logo and some tip less upon seeing it, it makes sense, right? Different people have different credit card obligation status, hence, people are reminded of their own card obligation status and they tip accordingly.

Answer choice B increases the probability that the psychologists' interpretation is true because it tells you that in the cases of very high credit card obligations, customers tip less. This is what you would expect if the psychologists' interpretation were correct.

In simpler terms, the logic here is similar to the following situation:

A: After 12 hours of night time sleep, I can't study.

B: Yeah, because your sleep pattern is linked to your level of concentration. After a long sleep, your mind is still muddled and lazy so you can't study.

A: After only 4 hrs of night time sleep, I can't study either.

Does B's theory make sense? Sure! B's theory is that "sleep pattern is linked to level of concentration." If A sleeps too much, her concentration is affected. If she sleeps too little, again her concentration is affected. So B's theory certainly makes more sense.

Let's now review answer choice E since it tends to confuse people:

*(E) The percentage of restaurant bills paid with given brand of credit card increases when that credit card's logo is displayed on the tray with which the bill is prepared.*

This option supports the hypothesis that credit card logos remind people of their own card – not of their card obligations. The psychologists' interpretation talks about the logo reminding people of their card status (high spending power or high obligations). Hence, this option is not correct.

Now let's examine the rest of the answer choices to see why they are also incorrect:

*(A) The effect noted in the studies is not limited to patrons who have credit cards.*

This argument is focused only on credit cards, not on credit cards and their logos, so this is irrelevant.

*(C) In virtually all of the cases in the studies, the patrons who paid bills in cash did not possess credit cards.*

This option questions the validity of the psychologists' interpretation. Hence, this is also not correct.

*(D) In general, restaurant patrons who pay their bills in cash leave larger tips than do those who pay by credit card.*

This argument deals with people who have credit cards but are tipping by cash, hence this is also irrelevant.

Therefore, our answer is B.

We hope you see that if you approach GMAT questions logically and stick to the basics, it is not hard to interpret and solve them, even if they include information from an unfamiliar field.

## Evaluating “Useful to Evaluate” Critical Reasoning Questions on the GMAT

In today's post, we will look at how to answer "useful to evaluate" Critical Reasoning questions in the Verbal section of the GMAT. Arguably, this is one of the toughest question types for test-takers to tackle (perhaps right after [boldfaced questions](#)).

To answer this type of question, all you will need to do is follow these six simple steps:

- 1) Identify the conclusion.
- 2) Ask yourself the question raised by answer choice A.
- 3) Answer it with a "yes" and figure out whether it affects the conclusion.
- 4) Answer it with a "no" and figure out whether it affects the conclusion.
- 5) Repeat this for all other answer choices.
- 6) Only one option will affect the conclusion differently in the two cases – that is your answer.

Let's illustrate this concept with a problem:

*In a certain wildlife park, park rangers are able to track the movements of many rhinoceroses because those animals wear radio collars. When, as often happens, a collar slips off, it is put back on. Putting a collar on a rhinoceros involves immobilizing the animal by shooting it with a tranquilizer dart. Female rhinoceroses that have been frequently re-collared have significantly lower*

*fertility rates than uncollared females. Probably, therefore, some substance in the tranquilizer inhibits fertility.*

*In evaluating the argument, it would be most useful to determine which of the following?*

*(A) Whether there are more collared female rhinoceroses than uncollared female rhinoceroses in the park.*

*(B) How the tranquilizer that is used for immobilizing rhinoceroses differs, if at all, from tranquilizers used in working with other large mammals*

*(C) How often park rangers need to use tranquilizer darts to immobilize rhinoceroses for reasons other than attaching radio collars*

*(D) Whether male rhinoceroses in the wildlife park lose their collars any more often than the park's female rhinoceroses do*

*(E) Whether radio collars are the only practical means that park rangers have for tracking the movements of rhinoceroses in the park*

First, we need to break down the argument to find the premises and the conclusion:

- Many rhinoceroses wear radio collars.
- Often, collars slip.
- When a collar slips, the animal is shot with a tranquilizer to re-collar.
- The fertility of frequently re-collared females is less than the fertility of uncollared females.

- Conclusion: Some substance in the tranquilizer inhibits fertility.

Let's take a look at each answer choice:

*(A) Whether there are more collared female rhinoceroses than uncollared female rhinoceroses in the park.*

Even if there are more collared female rhinoceroses than uncollared females, this does not affect the argument's conclusion. This answer choice talks about collared females vs. uncollared females; we are comparing the fertility of *re-collared* females with that of uncollared females. Anyway, how many of either type there are doesn't matter. So, whether you answer "yes" or "no" to this question, it is immaterial.

*(B) How the tranquilizer that is used for immobilizing rhinoceroses differs, if at all, from tranquilizers used in working with other large mammals.*

This option is comparing the tranquilizers used for rhinoceroses with the tranquilizers used for other large mammals. What the conclusion does, however, is compare collared female rhinoceroses with uncollared female rhinoceroses. Hence, whether you answer "very different" or "not different at all" to this question, in the end, it doesn't matter.

*(C) How often park rangers need to use tranquilizer darts to immobilize rhinoceroses for reasons other than attaching radio collars.*

This answer choice can be evaluated in two ways:

- Very Often – Tranquilizers are used very often for uncollared females, too. In this case, can we still say that “tranquilizers inhibit fertility”? No! If they did, fertility in uncollared females would have been low, too.
- Rarely – This would strengthen our conclusion. If tranquilizers are not used on uncollared females, it is possible that something in these tranquilizers inhibits fertility.

*(D) Whether male rhinoceroses in the wildlife park lose their collars any more often than the park’s female rhinoceroses do.*

This answer choice is comparing the frequency of tranquilizers used on male rhinoceroses with the frequency of tranquilizers used on female rhinoceroses. What the conclusion actually does is compare collared female rhinoceroses with uncollared female rhinoceroses. Hence, whether you answer this question with “more frequently” or “not more frequently,” it doesn’t matter.

*(E) Whether radio collars are the only practical means that park rangers have for tracking the movements of rhinoceroses in the park.*

This option is comparing radio collars with other means of tracking. What the conclusion does is compare collared female rhinoceroses with uncollared female rhinoceroses. Hence, whether you answer this question with “there are other means” or “there are no other means,” again, it does not matter.

Note that only answer choice C affects the conclusion – if you answer the question it raises differently, it affects the conclusion differently. Option C would be good to know to evaluate the conclusion of the argument, therefore, the answer must be C.

Now try this question on your own:

*Following several years of declining advertising sales, the Greenville Times reorganized its advertising sales force two years ago. Before the reorganization, the sales force was organized geographically, with some sales representatives concentrating on city-center businesses and others concentrating on different outlying regions. The reorganization attempted to increase the sales representatives' knowledge of clients' businesses by having each sales representative deal with only one type of industry or of retailing. After the reorganization, advertising sales increased.*

*In assessing whether the improvement in advertising sales can properly be attributed to the reorganization, it would be helpful to find out each of the following EXCEPT:*

*(A) Two years ago, what proportion of the Greenville Times' total revenue was generated by advertising sales?*

*(B) Has the circulation of the Greenville Times increased substantially in the last two years?*

*(C) Has there been a substantial turnover in personnel in the advertising sales force over the last two years?*

*(D) Before the reorganization, had sales representatives found it difficult to keep up with relevant developments in all types of businesses to which they are assigned?*

*(E) Has the economy in Greenville and the surrounding regions been growing rapidly over the last two years?*

We hope you will find this post useful to evaluate the “useful to evaluate” questions!

## Evaluating “Useful to Evaluate” Critical Reasoning Questions – Part II

Last week we looked at how to handle “[useful to evaluate](#)” questions in the Verbal section, and we left you with a tricky “useful to evaluate except” question. Let’s take a look at that problem today. “Except” questions are usually more difficult to deal with since we need to find four “correct” options (which we are not as used to). So, let’s take a look at this question:

*Following several years of declining advertising sales, the Greenville Times reorganized its advertising sales force two years ago. Before the reorganization, the sales force was organised geographically, with some sales representatives concentrating on city center businesses and others concentrating on different outlying regions. The reorganization attempted to increase the sales representatives’ knowledge of clients’ businesses by having each sales representative deal with only one type of industry or of retailing. After the reorganization, advertising sales increased.*

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*(C) Has there been a substantial turnover in personnel in the advertising sales force over the last two years?*

*(D) Before the reorganization, had sales representatives found it difficult to keep up with relevant developments in all types of businesses to which they are assigned?*

*(E) Has the economy in Greenville and the surrounding regions been growing rapidly over the last two years?*

Let's first break down what the argument says:

- Advertising sales were declining.
- The paper reorganized the advertising sales team two years back.
- Advertising sales increased after reorganisation.

Now, we want to figure out whether the increase actually happened due to the reorganization; in other words, we need to evaluate what else could have caused the increase in sales, if not the reorganization. Say the lead of the sales team

changed two years back – it is possible that he is responsible for the increase in revenue. Four of the five answer choices will raise similar questions, while the leftover option (which will be our answer) will not. Let's take a look at each of the answer choices:

*(A) Two years ago, what proportion of the Greenville Times' total revenue was generated by the advertising sales?*

The proportion of advertising sales as a part of the total revenue is immaterial to us – we only need to evaluate why the advertising sales have increased. It is possible that the revenue from other sources has increased much more than the revenue from advertising sales, and hence, advertising sales could be a smaller proportion of the overall revenue now, however this doesn't matter at all. This option has nothing to do with the increase in advertising sales, and hence, is the correct answer.

Let's take a look at all the other options too, just to be safe:

*(B) Has the circulation of the Greenville Times increased substantially in the last two years?*

This answer choice can be evaluated in two ways:

1. Yes, it has increased – If the circulation increased substantially in the last two years, that could have led to the increase in advertising sales.
2. No, it has not increased – If the circulation hasn't increased substantially, then there must be another reason for the increase in advertising sales. In that case, the reorganization could be the reason.

These two answers affect the argument differently, and hence, this option will be useful in evaluating the argument.

*(C) Has there been a substantial turnover in personnel in the advertising sales force over the last two years?*

Again, the answer choice can be evaluated in two ways:

1. Yes, there has – If there has been a substantial turnover in personnel, it is possible that more capable people have been hired, which could have led to higher advertising sales.
2. No, there hasn't – If there hasn't been a substantial turnover in personnel, then there would need to be another reason for the increased advertising sales. In that case, the reorganization could be the reason.

The two answers affect the argument differently, so this option will also be useful in evaluating the argument.

*(D) Before the reorganization, had sales representatives found it difficult to keep up with relevant developments in all types of businesses to which they are assigned?*

This option can also be evaluated in two ways:

1. Yes, they did find it difficult – Did reorganization make it easier to keep track of relevant developments? If yes, then the reorganization could be responsible for the increase in sales.

2. No, they did not find it difficult – If they did not find it difficult to keep up with relevant developments, then we cannot say whether the reorganization was responsible for the increase in sales or not.

These two responses affect the argument differently. Hence, this option will be useful in evaluating the argument.

*(E) Has the economy in Greenville and the surrounding regions been growing rapidly over the last two years?*

Answer choice E can also be evaluated in two ways:

1. Yes, it has – If the economy has been growing rapidly over the past two years, it could be the reason for higher advertising sales. Then we may not be able to attribute the improvement in advertising sales to the reorganization.
2. No it has not – If there has been no such growth in the economy, then reorganization could be the reason for higher advertising sales.

Again, the two responses affect the argument differently, so this option will also be useful in evaluating the argument.

We see that B, C, D and E are all useful in evaluating the argument. Therefore, our answer is A. We hope you will find it easier to handle such questions in the future!

# How to Negate Assumption Answer Choices on the GMAT

Most GMAT test-takers come across the [Assumption Negation Technique](#) at some point in their preparation. It is one of the most effective techniques for assumption questions (which are usually fairly difficult) if you learn to apply it successfully.

We already know that many sentences are invalidated by negating the verb of the dominant clause. For example:

*There has been a corresponding increase in the number of professional companies devoted to other performing arts.*

becomes

*There has not been a corresponding increase in the number of professional companies devoted to other performing arts.*

Recently, we got a query on how to negate various modifiers such as “most” and “a majority”. So today, we will examine how to negate the most popular modifiers we come across:

- All -> Not all
- Everything -> Not everything
- Always -> Not always
- Some -> None
- Most -> Half or less than half

- Majority -> Half or less than half
- Many -> Not many
- Less than -> Equal to or more than
- Element A -> Not element A
- None -> Some
- Never -> Sometimes

Let's take a look at some examples with these determiners:

1) "All of the 70 professional opera companies are commercially viable options."

This becomes, "Not all of the 70 professional opera companies are commercially viable options."

2) "There were fewer than 45 professional opera companies that had been active 30 years ago and that ceased operations during the last 30 years."

This becomes, "There were 45 or more professional opera companies that had been active 30 years ago and that ceased operations during the last 30 years."

3) "No one who is feeling isolated can feel happy."

This becomes, "Some who are feeling isolated can feel happy."

4) "Anyone who is able to trust other people has a meaningful emotional connection to at least one other human being."

This becomes, "Not everyone who is able to trust other people has a meaningful emotional connection to at least one other human being."

5) “The 45 most recently founded opera companies were all established as a result of enthusiasm on the part of a potential audience.”

This becomes, “The 45 most recently founded opera companies were not all established as a result of enthusiasm on the part of a potential audience.”

6) “Many of the vehicles that were ticketed for exceeding the speed limit were ticketed more than once in the time period covered by the report.”

This becomes, “Not many of the vehicles that were ticketed for exceeding the speed limit were ticketed more than once in the time period covered by the report.”

7) “The birds of prey capture and kill every single Spotted Mole that comes above ground.”

This becomes, “Not every single Spotted Mole that comes above ground is captured and killed by the birds of prey.”

8) “At least some people who do not feel isolated are happy.”

This becomes, “No people who do not feel isolated are happy.”

9) “Some land-based mammals active in this region, such as fox, will also hunt and eat the Spotted Mole on a regular basis.”

This becomes, “None of the land-based mammals active in this region, such as fox, will also hunt and eat the Spotted Mole on a regular basis.”

10) “No other animal could pose as significant a threat to the above-ground fruits as could the Spotted Mole.”

This becomes, “Some other animals could pose as significant a threat to the above-ground fruits as could the Spotted Mole.”

We hope the next time you come across an assumption question, you will not face any trouble negating the answer choices!

## Using Prepositional Phrases on the GMAT

In previous posts, we have already discussed [participles](#) as well as [absolute phrases](#). Today, let’s take a look at another type of modifier – the prepositional phrase.

A prepositional phrase will begin with a preposition and end with a noun, pronoun, gerund, or clause – the “object” of the preposition. The object of the preposition might have one or more modifiers to describe it.

Here are some examples of prepositional phrases (with prepositions underlined):

- ... along the ten mile highway...
- ... with a cozy blanket...
- ... without worrying...
- ... about what he likes...

A prepositional phrase can function as an adjective or an adverb. As an adjective, it answers the question, “Which one?” while as an adverb it can answer the questions, “How?” “When?” or “Where?”.

For example:

- *The book under the table belongs to my mom.* Here, the prepositional phrase acts as an adjective and tells us “which one” of the books belongs to my mom.
- *We tried the double cheeseburger at the new burger joint.* Here, the prepositional phrase acts as an adverb and tells us “where” we tried the cheeseburger.

Like other modifiers, a prepositional modifier should be placed as close as possible to the thing it is modifying.

Let’s take a look at a couple of official GMAT questions to see how understanding prepositional phrases can help us on this exam:

*The nephew of Pliny the Elder wrote the only eyewitness account of the great eruption of Vesuvius in two letters to the historian Tacitus.*

*(A) The nephew of Pliny the Elder wrote the only eyewitness account of the great eruption of Vesuvius in two letters to the historian Tacitus.*

*(B) To the historian Tacitus, the nephew of Pliny the Elder wrote two letters, being the only eyewitness accounts of the great eruption of Vesuvius.*

*(C) The only eyewitness account is in two letters by the nephew of Pliny the Elder writing to the historian Tacitus an account of the great eruption of Vesuvius.*

*(D) Writing the only eyewitness account, Pliny the Elder's nephew accounted for the great eruption of Vesuvius in two letters to the historian Tacitus.*

*(E) In two letters to the historian Tacitus, the nephew of Pliny the Elder wrote the only eyewitness account of the great eruption of Vesuvius.*

There are multiple prepositional phrases here:

- *of the great eruption of Vesuvius* (answers “Which eruption?”)
- *in two letters* (tells us “where” he wrote his account)
- *to the historian Tacitus* (answers “Which letters?”)

Therefore, the phrase “to the historian Tacitus” should be close to what it is describing, “letters,” which makes answer choices B and C incorrect.

Also, “in two letters to the historian Tacitus” should modify the verb “wrote.” In options A and D, “in two letters to the historian Tacitus” seems to be modifying “eruption,” which is incorrect. (There are other errors in answer choices B, C and D as well, but we will stick to the topic at hand.)

Option E corrects the prepositional phrase errors by putting the modifier close to the verb “wrote,” so therefore, E is our answer.

Let's try one more:

*Defense attorneys have occasionally argued that their clients' misconduct stemmed from a reaction to something ingested, but in attributing criminal or delinquent behavior to some food allergy, the perpetrators are in effect told that they are not responsible for their actions.*

*(A) in attributing criminal or delinquent behavior to some food allergy*

*(B) if criminal or delinquent behavior is attributed to an allergy to some food*

*(C) in attributing behavior that is criminal or delinquent to an allergy to some food*

*(D) if some food allergy is attributed as the cause of criminal or delinquent behavior*

*(E) in attributing a food allergy as the cause of criminal or delinquent behavior*

This sentence has two clauses:

**Clause 1:** Defense attorneys have occasionally argued that their clients' misconduct stemmed from a reaction to something ingested,

**Clause 2:** in attributing criminal or delinquent behavior to some food allergy, the perpetrators are in effect told that they are not responsible for their actions.

These two clauses are joined by the conjunction "but," and the underlined part is a prepositional phrase in the second clause.

Answer choices A, C and E imply that the perpetrators are attributing their own behaviors to food allergies. That is not correct – their defense attorneys are

attributing their behavior to food allergies, and hence, all three of these options have modifier errors.

This leaves us with B and D. Answer choice D uses the phrase “attributed as,” which is grammatically incorrect – the correct usage should be “X is attributed to Y,” rather than “X attributed as Y.” Therefore, option B is our answer.

As you can see, the proper placement of prepositional phrases is instrumental in creating a sentence with a clear, logical meaning. Since that type of clear, logical meaning is a primary emphasis of correct Sentence Correction answers, you should be prepared to look for prepositional phrases (here we go...) \*on the GMAT\*.

## A Closer Look at Absolute Phrases on the GMAT

Read the following sentences:

1. About 70 percent of the tomatoes grown in the United States come from seeds that have been engineered in a laboratory, their DNA modified with genetic material not naturally found in tomato species.
2. The defense lawyer and witnesses portrayed the accused as a victim of circumstance, his life uprooted by the media pressure to punish someone in the case.
3. Researchers in Germany have unearthed 400,000-year-old wooden spears from what appears to be an ancient lakeshore hunting ground, stunning

evidence that human ancestors systematically hunted big game much earlier than believed.

Which grammatical construct is represented by the underlined portions of these sentences?

These are called **absolute phrases**. They often confuse people but once you understand properly what they are and what they do, they will not be intimidating.

### **What is an Absolute Phrase?**

An absolute phrase is a type of modifier that modifies an independent clause as a whole.

### **Structure of an Absolute Phrase**

Often (but not always), this is the structure of an absolute phrase:

noun + participle (could be -ing or -ed) + optional modifier or object

### **Usage of an Absolute Phrase**

It is often useful in describing **one part of the whole person/place/thing** or in **explaining a cause or condition etc.**

For example:

There was no one in sight and Sanders, his hands still jammed in his pockets, scowled down the empty street. (The underlined absolute phrase describes just the hands of Sanders)

We devoured the yummy pastries, our fingers scraping the leftover frosting off the plates. (The underlined absolute phrase describes just our fingers)

The underlined absolute phrase in sentence 1 above describes the DNA of the seeds.

The underlined absolute phrases in sentences 2 and 3 above describe conditions.

### **Some Alternative Structures of Absolute Phrases**

Some absolute phrases have a different structure.

1. The participle *being* is often omitted in an absolute phrase, leaving only a noun and a modifier:

The boys set off for school, faces glum, to begin the winter term.

1. Also, an absolute phrase may contain a pronoun instead of a noun, or an infinitive (*to* + a verb) instead of a participle:

The customers filed out, some to return home, others to gather at the piazza.

[pronoun 'some' + infinitive 'to return' ; pronoun 'others' + infinitive 'to gather']

Now let's look at the sentence correction question which uses statement 2.

**Question:** The defense lawyer and witnesses portrayed the accused as a victim of circumstance, his life uprooted by the media pressure to punish someone in the case.

- (A) circumstance, his life
- (B) circumstance, and his life
- (C) circumstance, and his life being
- (D) circumstance; his life
- (E) circumstance: his life being

**Solution:**

“his life uprooted by the media pressure to punish someone in the case.” and “his life being uprooted by the media pressure to punish someone in the case.” are not independent clauses because they have no finite verbs in them.

With the coordinating conjunction ('and') and semi colon, you need an independent clause.

Accuracy wise, the use of 'being' is still suspect. 'Being' is not used to describe a state; it is used to describe an ongoing action such as 'the tree is being uprooted'.

Colon is used if you need to give a list and hence, is not suitable here. Hence, options (B), (C), (D) and (E) are wrong.

Only option (A) describes circumstances suitably using the absolute phrase: his life uprooted by the media pressure to punish someone in the case.

Answer (A)

## Using “Like” vs. “As” on the GMAT Verbal Section

If you have seen the Veritas Prep curriculum, then you know we frequently highlight the strategy of “Think like the Testmaker” to answer GMAT questions. Recently, we had a student question the grammatical validity of this construct – this brought the “like” vs. “as” debate to mind, so we decided to tackle it this week.

When should you use “like” and when should you use “as” in a sentence?

Both words can be used in comparisons, however the structure of the sentence will be different in the two cases. This is because traditionally, “like” is a

preposition and “as” is a conjunction – a preposition takes the form of an object while a conjunction takes the form of a clause. Therefore:

**Using “like,” we compare nouns/pronouns** (including gerunds). Usually, a single verb will be used.

**Using “as,” we compare actual actions.** There will be two verbs used when we compare using “as.”

So, this is how we are going to compare “like” and “as”:

- *He runs like a madman.* – A single verb, “runs.”
- *He runs as a madman does.* – Two verbs, “runs” and “does” (which is equivalent to “does run”).

In the same way, both of the following sentences are correct:

- Think *like* the Testmaker.
- Think *as* the Testmaker does.

But beware – “as” used with a noun or pronoun alone does not mean that this usage is incorrect. “As” can also be used to show a role or capacity. For example, in the sentence, “She works as a consultant,” the word “as” means that she works in the capacity of a consultant. There is no comparison here, but the sentence is still grammatically correct.

Also, we usually use “like” in the case of hypothetical comparisons. Take, for instance, the sentence, “She screams like a banshee.” Here, it would be odd to

say, “She screams as a banshee does,” because we don’t really know how a banshee screams.

Let’s look at a few GMAT Sentence Correction questions now:

*Like many self-taught artists, Perle Hessing did not begin to paint until she was well into middle age.*

(A) *Like*

(B) *As have*

(C) *Just as with*

(D) *Just like*

(E) *As did*

In this sentence, the word “like” is correctly comparing “Perle Hessing” to “many self taught artists.” There is no clause after “like” and we are using a single verb. Hence, the use of “like” is correct and our answer is A.

Not too bad, right? Let’s try another question:

*Based on recent box office receipts, the public’s appetite for documentary films, like nonfiction books, seems to be on the rise.*

(A) *like nonfiction books*

*(B) as nonfiction books*

*(C) as its interest in nonfiction books*

*(D) like their interest in nonfiction books*

*(E) like its interest in nonfiction books*

This sentence also has a comparison, and it is between “appetite” and “interest” and how they are both on a rise. Answer choice E compares “appetite” to “interest” using “like” as a single verb. None of the answer choices have “as” with a clause so the answer must be E.

These were two simple examples of “like” vs. “as.” Now let’s look at a higher-level GMAT question:

*During an ice age, the buildup of ice at the poles and the drop in water levels near the equator speed up the Earth’s rotation, like a spinning figure skater whose speed increases when her arms are drawn in.*

*(A) like a spinning figure skater whose speed increases when her arms are drawn in*

*(B) like the increased speed of a figure skater when her arms are drawn in*

*(C) like a figure skater who increases speed while spinning with her arms drawn in*

*(D) just as a spinning figure skater who increases speed by drawing in her arms*

*(E) just as a spinning figure skater increases speed by drawing in her arms*

There is a comparison here, but between which two things? Answer choice A seems to be comparing “Earth’s rotation” to “spinning figure skater,” but these two things are not comparable. Option E is the correct choice here – it compares “speed up Earth’s rotation” to “skater increases speed.” Therefore, our answer is E.

## Some GMAT Questions Using the “Like” vs. “As” Concept

Today we will look at some official GMAT questions testing the “like” vs. “as” concept we discussed last week.

(Review [last week’s post](#) – if you haven’t read it already – before you read this one for greater insight on this concept.)

Take a look at the following GMAT Sentence Correction question:

*As with those of humans, the DNA of grape plants contains sites where certain unique sequences of nucleotides are repeated over and over.*

*(A) As with those of humans, the DNA of grape plants contains sites where*

*(B) As human DNA, the DNA of grape plants contain sites in which*

*(C) As it is with human DNA, the DNA of grape plants, containing sites in which*

*(D) Like human, the DNA of grape plants contain sites where*

*(E) Like human DNA, the DNA of grape plants contains sites in which*

Should we use “as” or “like”? Well, what are we comparing? We’re comparing the DNA of humans to the DNA of grape plants. Answer choice E compares these two properly – “Like human DNA, the DNA of grape plants...” DNA is singular, so it uses the singular verb “contains”.

All other options are incorrect. Answer choice A uses “those of” for DNA, but DNA is singular, so this cannot be right. B uses “as” to compare the two nouns, which is also incorrect. C is a sentence fragment without a main verb. And D compares “human” to “DNA”, which is not the “apples-to-apples” comparison we need to make this sentence correct. Therefore, our answer must be E.

Let’s try another one:

*Like Auden, the language of James Merrill is chatty, arch, and conversational — given to complex syntactic flights as well as to prosaic free-verse strolls.*

*(A) Like Auden, the language of James Merrill*

*(B) Like Auden, James Merrill's language*

*(C) Like Auden's, James Merrill's language*

*(D) As with Auden, James Merrill's language*

*(E) As is Auden's the language of James Merrill*

Here, we're comparing Auden's language to James Merrill's language. Answer choice C correctly uses the possessive "Auden's" to show that language is implied. "Like Auden's language, James Merrill's language ..." contains both parallel structure and a correct comparison.

Answer choices A, B and D incorrectly compare "Auden" to "language," rather than "Auden's language" to "language," so those options are out. The structure of answer choice E is not parallel – "Auden's" vs. "the language of James Merrill". Therefore, the answer must be C.

Let's try something more difficult:

*More than thirty years ago Dr. Barbara McClintock, the Nobel Prize winner, reported that genes can "jump," as pearls moving mysteriously from one necklace to another.*

*(A) as pearls moving mysteriously from one necklace to another*

*(B) like pearls moving mysteriously from one necklace to another*

(C) *as pearls do that move mysteriously from one necklace to others*

(D) *like pearls do that move mysteriously from one necklace to others*

(E) *as do pearls that move mysteriously from one necklace to some other one*

This is a tricky question – it’s perfect for us to re-iterate how important it is to focus on the meaning of the given sentence. Do not try to follow grammar rules blindly on the GMAT!

Is the comparison between “genes jumping” and “pearls moving”? Do pearls really move mysteriously from one necklace to another? No! This is a hypothetical situation, so we must use “like” – genes are *like* pearls. Answer choices B and D are the only ones that use “like,” so we can eliminate our other options. D uses a clause with “like,” which is incorrect. In answer choice B, “moving from ...” is a modifier – “moving” doesn’t act as a verb here, so it doesn’t need a clause. Hence, answer choice B is correct.

Here’s another one:

*According to a recent poll, owning and living in a freestanding house on its own land is still a goal of a majority of young adults, like that of earlier generations.*

(A) *like that of earlier generations*

(B) *as that for earlier generations*

(C) *just as earlier generations did*

*(D) as have earlier generations*

*(E) as it was of earlier generations*

Note the parallel structure of the comparison in answer choice E – “Owning ... a house... is still a goal of young adults, as it was of earlier generations.” It correctly uses “as” with a clause.

Answer choice A uses “that” but its antecedent is not very clear; there are other nouns between “goal” and “like,” and hence, confusion arises. None of the other answer choices give us a clear, parallel comparison, so our answer is E.

Alright, last one:

*In Hungary, as in much of Eastern Europe, an overwhelming proportion of women work, many of which are in middle management and light industry.*

*(A) as in much of Eastern Europe, an overwhelming proportion of women work, many of which are in*

*(B) as with much of Eastern Europe, an overwhelming proportion of women works, many in*

*(C) as in much of Eastern Europe, an overwhelming proportion of women work, many of them in.*

*(D) like much of Eastern Europe, an overwhelming proportion of women works, and many are.*

*(E) like much of Eastern Europe, an overwhelming proportion of women work, many are in.*

Another tricky question. The comparison here is between “what happens in Hungary” and “what happens in much of Eastern Europe,” not between “Hungary” and “much of Eastern Europe.” A different sentence structure would be required to compare “Hungary” to “much of Eastern Europe” such as “Hungary, like much of Eastern Europe, has an overwhelming ...”

With prepositional phrases, as with clauses, “as” is used. So, we have two relevant options – A and C. Answer choice A uses “which” for “women,” and hence, is incorrect. Therefore, our answer is C.

Here are some takeaways to keep in mind:

- You should be comparing “apples” to “apples”.
- Parallel structure is important.
- Use “as” with prepositional phrases.

## Are Official Answers Debatable on the GMAT?

Let’s begin with the bottom line: no, they are not. If you are thinking along the lines of, “This official answer cannot be correct! How can the answer be A? It must be C, or C is at least just as valid as A,” then you are wasting your time. The answer given is never debatable. What you should be thinking instead is,

“The answer given is A, but I thought it was C. I must find out where I made a mistake.”

The point is that since you are going to take GMAT, you must learn to think like the GMAT testmakers. The answers they give for these questions are the correct answers, so need to accept that – this way, the next step of figuring out the gap in your understanding will be far easier. Today, let’s take a look at an official question that is often debated:

*The average hourly wage of television assemblers in Vernland has long been significantly lower than that in neighboring Borodia. Since Borodia dropped all tariffs on Vernlandian televisions three years ago, the number of televisions sold annually in Borodia has not changed. However, recent statistics show a drop in the number of television assemblers in Borodia. Therefore, updated trade statistics will probably indicate that the number of televisions Borodia imports annually from Vernland has increased.*

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

*(A) The number of television assemblers in Vernland has increased by at least as much as the number of television assemblers in Borodia has decreased.*

*(B) Televisions assembled in Vernland have features that televisions assembled in Borodia do not have.*

*(C) The average number of hours it takes a Borodian television assembler to assemble a television has not decreased significantly during the past three years.*

*(D) The number of televisions assembled annually in Vernland has increased significantly during the past three years.*

*(E) The difference between the hourly wage of television assemblers in Vernland and the hourly wage of television assemblers in Borodia is likely to decrease in the next few years.*

First, let's look at the premises of the argument:

- The hourly wage of assemblers in Vernland is much lower than that in Borodia.
- 3 years ago, Borodia dropped all tariffs on TVs imported from Vernland.
- The number of TVs sold annually in Borodia is same.
- However, the number of assemblers in Borodia has decreased.

The conclusion is that the trade statistics will probably indicate that the number of televisions Borodia imports annually from Vernland has increased.

This conclusion might look logical, but it is full of assumptions.

Why does this conclusion seem so logical? Wages in Vernland are lower, so it would seem like TVs should be cheaper here. Borodia dropped all tariffs on imported TVs, which means there will be no artificial inflation of Vernland TV prices. Finally, the number of TVs sold in Borodia has not dropped, but number of assemblers in Borodia has dropped, which makes it look like fewer TVs are getting made in Borodia.

An onlooker might conclude that Borodia is importing more TVs from Vernland because they are cheaper, but here are some assumptions that come to mind:

- The cost of a TV in Vernland is lower because assembler's wage is lower. What if the raw material cost is higher in Vernland? Or other costs are higher? The cost to produce a Vernland TV could actually be higher than the cost to produce a Borodia TV.
- Fewer TVs are getting made in Borodia, but that does not mean that Borodian assemblers have not become more productive. What if fewer assemblers are needed because they can actually complete the assembly process much faster? The number of TVs sold is the same, however, if each assembler is doing more work, fewer assemblers will be needed. In this case, the number of TVs made in Borodia might not have changed even though the number of producers dropped.

Coming to our question now: *Which of the following is an assumption on which the argument depends?*

We are looking for an assumption, i.e. a NECESSARY premise. We have already identified some assumptions, so let's see if any of the answer choices gives us one of those:

*(A) The number of television assemblers in Vernland has increased by at least as much as the number of television assemblers in Borodia has decreased.*

This is the most popular incorrect answer choice. Test takers keep trying to justify why it makes perfect sense, but actually, it is not required for the conclusion to hold true.

The logic of test takers that pick this answer choice is often on the lines of, “If the number of workers from Borodia decreased, in order for Borodia to show an increased number of imports from Vernland, Vernland must have increased their number of workers by at least as much as the number of workers that left Borodia.”

Note that although this may sound logical, it is not necessary to the argument. There are lots of possible situations where this may not be the case:

Perhaps number of TVs being manufactured in Vernland is the same and, hence, the number of assemblers is the same, too. It is possible that out of the fixed number of TVs manufactured, fewer are getting locally bought and more are getting exported to Borodia. So, it is not necessarily true that number of TV assemblers in Vernland has increased.

*(B) Televisions assembled in Vernland have features that televisions assembled in Borodia do not have.*

This is also not required for the conclusion to hold – the TVs could actually be exactly the same, but the TVs assembled in Vernland could still be cheaper than the TVs assembled in Borodia due to a potentially lower cost of assembly in Vernland.

*(C) The average number of hours it takes a Borodian television assembler to assemble a television has not decreased significantly during the past three years.*

This is one of the assumptions we discussed above – we are assuming that the reduction in the number of assemblers must not be due to an increase in the

productivity of the assemblers because if the assemblers have got more productive, then the number of TVs produced could be the same and, hence, the number of TVs imported would not have increased.

*(D) The number of televisions assembled annually in Vernland has increased significantly during the past three years.*

This is not required for the conclusion to hold. Perhaps the number of TVs being sold in Vernland has actually reduced while more are getting exported to Borodia, so the overall number of TVs being made is the same.

*(E) The difference between the hourly wage of television assemblers in Vernland and the hourly wage of television assemblers in Borodia is likely to decrease in the next few years.*

This is also not required for the conclusion to hold. What happens to the hourly wages of assemblers in Vernland and Borodia in the future doesn't concern this argument – we are only concerned about what has been happening in the last 3 years.

Therefore, our answer is C.

# Why Critical Reasoning Needs Your Complete Attention on the GMAT!

Let's look at a tricky and time consuming official Critical Reasoning question today. We will learn how to focus on the important aspects of the question and quickly evaluate our answer choices:

*Tiger beetles are such fast runners that they can capture virtually any nonflying insect. However, when running toward an insect, a tiger beetle will intermittently stop and then, a moment later, resume its attack. Perhaps the beetles cannot maintain their pace and must pause for a moment's rest; but an alternative hypothesis is that while running, tiger beetles are unable to adequately process the resulting rapidly changing visual information and so quickly go blind and stop.*

*Which of the following, if discovered in experiments using artificially moved prey insects, would support one of the two hypotheses and undermine the other?*

*(A) When a prey insect is moved directly toward a beetle that has been chasing it, the beetle immediately stops and runs away without its usual intermittent stopping.*

*(B) In pursuing a swerving insect, a beetle alters its course while running and its pauses become more frequent as the chase progresses.*

*(C) In pursuing a moving insect, a beetle usually responds immediately to changes in the insect's direction, and it pauses equally frequently whether the chase is up or down an incline.*

*(D) If, when a beetle pauses, it has not gained on the insect it is pursuing, the beetle generally ends its pursuit.*

*(E) The faster a beetle pursues an insect fleeing directly away from it, the more frequently the beetle stops.*

First, take a look at the argument:

- Tiger beetles are very fast runners.
- When running toward an insect, a tiger beetle will intermittently stop and then, a moment later, resume its attack.

There are two hypotheses presented for this behavior:

1. The beetles cannot maintain their pace and must pause for a moment's rest.
2. While running, tiger beetles are unable to adequately process the resulting rapidly changing visual information and so quickly go blind and stop.

We need to support one of the two hypotheses and undermine the other. We don't know which one will be supported and which will be undermined. How will we support/undermine a hypothesis?

*The beetles cannot maintain their pace and must pause for a moment's rest.*

Support: Something that tells us that they do get tired. e.g. going uphill they pause more.

Undermine: Something that says that fatigue plays no role e.g. the frequency of pauses do not increase as the chase continues.

*While running, tiger beetles are unable to adequately process the resulting rapidly changing visual information and so quickly go blind and stop.*

Support: Something that says that they are not able to process changing visual information e.g. as speed increases, frequency of pauses increases.

Undermine: Something that says that they are able to process changing visual information e.g. it doesn't pause on turns.

Now, we need to look at each answer choice to see which one supports one hypothesis and undermines the other. Focus on the impact each option has on our two hypotheses:

*(A) When a prey insect is moved directly toward a beetle that has been chasing it, the beetle immediately stops and runs away without its usual intermittent stopping.*

This undermines both hypotheses. If the beetle is able to run without stopping in some situations, it means that it is not a physical ailment that makes him take pauses. He is not trying to catch his breath – so to say – nor is he adjusting his field of vision.

*(B) In pursuing a swerving insect, a beetle alters its course while running and its pauses become more frequent as the chase progresses.*

If the beetle alters its course while running, it is obviously processing changing visual information and changing its course accordingly while running. This undermines the hypothesis “it cannot process rapidly changing visual information”. However, if the beetle pauses more frequently as the chase progresses, it is tiring out more and more due to the long chase and, hence, is taking more frequent breaks. This supports the hypothesis, “it cannot maintain its speed and pauses for rest”.

Answer choice B strengthens one hypothesis and undermines the other. This must be the answer, but let’s check our other options, just to be sure:

*(C) In pursuing a moving insect, a beetle usually responds immediately to changes in the insect’s direction, and it pauses equally frequently whether the chase is up or down an incline.*

This answer choice undermines both hypotheses. If the beetle responds immediately to changes in direction, it is able to process changing visual information. In addition, if the beetle takes similar pauses going up or down, it is not the effort of running that is making it take the pauses (otherwise, going up, it would have taken more pauses since it takes more effort going up).

*(D) If, when a beetle pauses, it has not gained on the insect it is pursuing, the beetle generally ends its pursuit.*

This answer choice might strengthen the hypothesis that the beetle is not able to respond to changing visual information since it decides whether it is giving up or not after pausing (in case there is a certain stance that tells us that it has paused), but it doesn't actually undermine the hypothesis that the beetle pauses to rest. It is very possible that it pauses to rest, and at that time assesses the situation and decides whether it wants to continue the chase. Hence, this option doesn't undermine either hypothesis and cannot be our answer.

*(E) The faster a beetle pursues an insect fleeing directly away from it, the more frequently the beetle stops.*

This answer choice strengthens both of the hypotheses. The faster the beetle runs, the more rest it would need, and the more rapidly visual information would change causing the beetle to pause. Because this option does not undermine either hypothesis, it also cannot be our answer.

Only answer choice B strengthens one hypothesis and undermines the other, therefore, our answer must be B.

## Be Tolerant Towards Pronoun Ambiguity on the GMAT

We encounter many different types of pronoun errors on the GMAT Verbal Section. Some of the most common errors include:

**Using a pronoun without an antecedent.** For example, the sentence, “Although Jack is very rich, he makes poor use of it,” is incorrect because “it” has no antecedent. The antecedent should instead be “money” or “wealth.”

**Error in matching the pronoun to its antecedent in number and gender.** For example, the sentence, “Pack away the unused packets, and save it for the next game,” is incorrect because the antecedent of “it” is referring to “unused packets,” which is plural.

**Using a nominative/objective case pronoun when the antecedent is possessive.** For example, the sentence, “The client called the lawyer’s office, but he did not answer,” is incorrect because the antecedent of “he” should be referring to “lawyer,” but it appears only in the possessive case. Official GMAT questions will not give you this rule as the only decision point between two options.

But note that the rules governing pronoun ambiguity are not as strict as other rules! Pronoun ambiguity should be the last decision point for eliminating an option after we have taken care of SV agreements, tenses, modifiers, parallelism etc.

Every sentence that has two nouns before a pronoun does not fall under the “pronoun ambiguity error” category. If the pronoun agrees with two nouns in number and gender, and both nouns could be the antecedent of the pronoun, then there is a possibility of pronoun ambiguity. But in other cases, logic can dictate that only one of the nouns can really perform (or receive) an action, and so it is logically clear to which noun the pronoun refers.

For example, “Take the bag out of the car and get it fixed.”

What needs to get fixed? The bag or the car? Either is possible. Here we have a pronoun ambiguity, but it is highly unlikely you will see something like this on the GMAT.

A special mention should be made here about the role nouns play in the sentence. Often, a pronoun which acts as the subject of a clause refers to the noun which acts as a subject of the previous clause. In such sentences, you will often find that the antecedent is unambiguous. Similarly, if the pronoun acts as the direct object of a clause, it could refer to the direct object of the previous clause. If the pronoun and its antecedent play parallel roles, a lot of clarity is added to the sentence. But it is not necessary that the pronoun and its antecedent will play parallel roles.

Let’s look at a different example, “The car needs to be taken out of the driveway and its brakes need to get fixed.”

Here, obviously the antecedent of “its” must be the car since only it has brakes, not the driveway. Besides, the car is the subject of the previous clause and “its” refers to the subject. Hence, this sentence would be acceptable.

A good rule of thumb would be to look at the options. If no options sort out the pronoun issue by replacing it with the relevant noun, just forget about pronoun ambiguity. If there are options that clarify the pronoun issue by replacing it with the relevant noun, consider all other grammatical issues first and then finally zero in on pronoun ambiguity.

Let's take a quick look at some official GMAT questions involving pronouns now:

*Congress is debating a bill requiring certain employers provide workers with unpaid leave so as to care for sick or newborn children.*

*(A) provide workers with unpaid leave so as to*

*(B) to provide workers with unpaid leave so as to*

*(C) provide workers with unpaid leave in order that they*

*(D) to provide workers with unpaid leave so that they can*

*(E) provide workers with unpaid leave and*

The answer is (D). Why? The correct sentence would use “to provide” (not “provide”) and “so that” (not “so as to”), and should read, “Congress is debating a bill requiring certain employers to provide workers with unpaid leave so that they can care for sick or newborn children.” In this sentence, “they” logically refers to “workers.” Even though “they” could refer to employers, too, after you sort out the rest of the errors, you are left with (D) only, hence answer must be (D).

Let's look at another question:

*While depressed property values can hurt some large investors, they are potentially devastating for homeowners, whose equity – in many cases representing a life's savings – can plunge or even disappear.*

*(A) they are potentially devastating for homeowners, whose*

*(B) they can potentially devastate homeowners in that their*

*(C) for homeowners they are potentially devastating, because their*

*(D) for homeowners, it is potentially devastating in that their*

*(E) it can potentially devastate homeowners, whose*

The correct answer is (A). The correct sentence should read, “While depressed property values can hurt some large investors, they are potentially devastating for homeowners, whose equity – in many cases representing a life’s savings – can plunge or even disappear.” The pronoun “they” logically refers to “depressed property values.” Both the pronoun and its antecedent serve as subjects in their respective clauses, so the pronoun antecedent is quite clear.

One more question:

*Although Napoleon’s army entered Russia with far more supplies than they had in their previous campaigns, it had provisions for only twenty-four days.*

*(A) they had in their previous campaigns*

*(B) their previous campaigns had had*

*(C) they had for any previous campaign*

*(D) in their previous campaigns*

*(E) for any previous campaign*

The correct answer is (E). The correct sentence should read, “Although Napoleon’s army entered Russia with far more supplies than for any previous campaign, it had provisions for only twenty-four days.”

The pronoun “it” logically refers to “Napoleon’s army” and not Russia. Both the pronoun and its antecedent serve as subjects in their respective clauses, so the pronoun antecedent is quite clear. Note that the pronoun and its antecedent are a part of the non-underlined portion of the sentence so we don’t need to worry about the usage here but it strengthens our understanding of pronoun ambiguity.

## Circular Reasoning in GMAT Critical Reasoning Questions

Consider this argument:

*Anatomical bilateral symmetry is a common trait. It follows, therefore, that it confers survival advantages on organisms. After all, if bilateral symmetry did not confer such advantages, it would not be common.*

What is the flaw here?

The argument restates rather than proves. The conclusion is a premise, too – we start out by assuming that the conclusion is true and then state that the conclusion is true.

If A (bilateral symmetry) were not B (confer survival advantages), A (bilateral symmetry) would not be C (common).

A (bilateral symmetry) is C (common) so A (bilateral symmetry) is B (confer survival advantages).

Note that we did not try to prove that “A is C implies A is B”. We did not explain the connection between C and B. For our reasoning, all we said is that if A were not B, it would not be C, so we are starting out by taking the conclusion to be true.

This is called **circular reasoning**. It is a kind of logical fallacy – a flaw in the logic. You begin with what you are trying to prove, using your own conclusion as one of your premises.

Why is it good to understand circular reasoning for the GMAT? A critical reasoning question that asks you to mimic the reasoning argument could require you to identify such a flawed reasoning and find the argument that mimics it.

Continuing with the previous example:

*Anatomical bilateral symmetry is a common trait. It follows, therefore, that it confers survival advantages on organisms. After all, if bilateral symmetry did not confer such advantages, it would not be common.*

*The pattern of reasoning in which one of the following arguments is most similar to that in the argument above?*

*(A) Since it is Sawyer who is negotiating for the city government, it must be true that the city takes the matter seriously. After all, if Sawyer had not been available, the city would have insisted that the negotiations be deferred.*

*(B) Clearly, no candidate is better qualified for the job than Trumbull. In fact, even to suggest that there might be a more highly qualified candidate seems absurd to those who have seen Trumbull at work.*

*(C) If Powell lacked superior negotiating skills, she would not have been appointed arbitrator in this case. As everyone knows, she is the appointed arbitrator, so her negotiating skills are, detractors notwithstanding, bound to be superior.*

*(D) Since Varga was away on vacation at the time, it must have been Rivers who conducted the secret negotiations. Any other scenario makes little sense, for Rivers never does the negotiating unless Varga is unavailable.*

*(E) If Wong is appointed arbitrator, a decision will be reached promptly. Since it would be absurd to appoint anyone other than Wong as arbitrator, a prompt decision can reasonably be expected.*

We've established that the above pattern of reasoning has a circular reasoning flaw. Let's consider each answer option to find the one which has similarly flawed reasoning.

*(A) Since it is Sawyer who is negotiating for the city government, it must be true that the city takes the matter seriously. After all, if Sawyer had not been available, the city would have insisted that the negotiations be deferred.*

Here is the structure of this argument:

If A (Sawyer) were not B (available), C (the city) would have D (insisted on deferring).

Since A (Sawyer) is B (available to the city), C (the city) does E (takes matter seriously).

Obviously, this argument structure is not the same as in the original argument.

*(B) Clearly, no candidate is better qualified for the job than Trumbull. In fact, even to suggest that there might be a more highly qualified candidate seems absurd to those who have seen Trumbull at work.*

Here is the structure of this argument:

A (people who have seen Trumbull at work) find B (Trumbull is not the best) absurd, therefore B (Trumbull is not the best) is false.

This is not circular reasoning. We have not assumed that B is false in our premises, we are simply saying that people think B is absurd. This is flawed logic too, but it is not circular reasoning.

*(C) If Powell lacked superior negotiating skills, she would not have been appointed arbitrator in this case. As everyone knows, she is the appointed*

*arbitrator, so her negotiating skills are, detractors notwithstanding, bound to be superior.*

Here is the structure of this argument:

If A (Powell) were not B (had superior negotiating skills), A (Powell) would not have been C (appointed arbitrator).

A (Powell) is C (appointed arbitrator), therefore A (Powell) is B (had superior negotiating skills).

Note that the structure of the argument matches the structure of our original argument – this is circular reasoning, too. We are saying that if A were not B, A would not be C and concluding that since A is C, A is B. The conclusion is already taken to be true in the initial argument, so we can see it is also an example of circular reasoning.

Hence (C) is the correct answer. Nevertheless, let's look at the other two options and why they don't work:

*(D) Since Varga was away on vacation at the time, it must have been Rivers who conducted the secret negotiations. Any other scenario makes little sense, for Rivers never does the negotiating unless Varga is unavailable.*

Here is the structure of this argument:

If A (Varga) is B (available), C (Rivers) does not do D (negotiate).

A (Varga) was not B (available), so C (Rivers) did D (negotiate).

This logic is flawed – the premise tells us what happens when A is B, however it does not tell us what happens when A is not B. We cannot conclude anything about what happens when A is not B. And because this is not circular reasoning, it cannot be the answer.

*(E) If Wong is appointed arbitrator, a decision will be reached promptly. Since it would be absurd to appoint anyone other than Wong as arbitrator, a prompt decision can reasonably be expected.*

Here is the structure of this argument:

If A (Wong) is B (appointed arbitrator), C (a decision) will be D (reached promptly).

A (Wong) not being B (appointed arbitrator) would be absurd, so C (a decision) will be D (reached promptly).

Again, this argument uses brute force, but it is not circular reasoning. “A not being B would be absurd” is not a convincing reason, so the argument is not strong as it is, but in any case, we don’t have to worry about it since it doesn’t use circular reasoning.

Take a look at this question for practice:

*Dr. A: The new influenza vaccine is useless at best and possibly dangerous. I would never use it on a patient.*

*Dr. B: But three studies published in the Journal of Medical Associates have rated that vaccine as unusually effective.*

*Dr. A: The studies must have been faulty because the vaccine is worthless.*

*In which of the following is the reasoning most similar to that of Dr. A?*

*(A) Three of my patients have been harmed by that vaccine during the past three weeks, so the vaccine is unsafe.*

*(B) Jerrold Jersey recommends this milk, and I don't trust Jerrold Jersey, so I won't buy this milk.*

*(C) Wingz tennis balls perform best because they are far more effective than any other tennis balls.*

*(D) I'm buying Vim Vitamins. Doctors recommend them more often than they recommend any other vitamins, so Vim Vitamins must be good.*

*(E) Since University of Muldoon graduates score about 20 percent higher than average on the GMAT, Sheila Lee, a University of Muldoon graduate, will score about 20 percent higher than average when she takes the GMAT.*

# Keeping an Open Mind in Critical Reasoning

Today we will discuss why it is important to keep an open mind while toiling away on your GMAT studying. Don't go into test day with biases expecting that if a question tells us this, then it must ask that. GMAC testmakers are experts in surprising you and taking advantage of your preconceived notions, which is how they confuse you and convert a 600-level question to a 700-level one.

We have discussed necessary and sufficient conditions before; we have also discussed assumptions before. This question from our own curriculum is an innovative take on both of these concepts. Let's take a look.

*All of the athletes who will win a medal in competition have spent many hours training under an elite coach. Michael is coached by one of the world's elite coaches; therefore it follows logically that Michael will win a medal in competition.*

*The argument above logically depends on which of the following assumptions?*

- (A) Michael has not suffered any major injuries in the past year.*
- (B) Michael's competitors did not spend as much time in training as Michael did.*
- (C) Michael's coach trained him for many hours.*
- (D) Most of the time Michael spent in training was productive.*

*(E) Michael performs as well in competition as he does in training.*

First we must break down the argument into premises and conclusions:

**Premises:**

- All of the athletes who will win a medal in competition have spent many hours training under an elite coach.
- Michael is coached by one of the world's elite coaches.

**Conclusion:** Michael will win a medal in competition.

Read the argument carefully:

*All of the athletes who will win a medal in competition have spent many hours training under an elite coach.*

Are you wondering, "How does one know that all athletes who will win (in the future) would have spent many hours training under an elite coach?"

The answer to this is that it doesn't matter how one knows – it is a premise and it has to be taken as the truth. How the truth was established is none of our business and that is that. If we try to snoop around too much, we will waste precious time. Also, what may seem improbable may have a perfectly rational explanation. Perhaps all athletes who are competing have spent many hours under an elite coach – we don't know.

Basically, what this statement tells us is that spending many hours under an elite coach is a NECESSARY condition for winning. What you need to take away from

this statement is that “many hours training under an elite coach” is a necessary condition to win a medal. Don’t worry about the rest.

*Michael is coached by one of the world’s elite coaches.*

It seems that Michael satisfies one necessary condition: he is coached by an elite coach.

***Conclusion:*** *Michael will win a medal in competition.*

Now this looks like our standard “gap in logic”. To get this conclusion, the necessary condition has been taken to be sufficient. So if we are asked for the flaw in the argument, we know what to say.

Anyway, let’s check out the question (this is usually our first step):

*The argument above logically depends on which of the following assumptions?*

Note the question carefully – it is asking for an assumption, or a necessary premise for the conclusion to hold.

We know that “many hours training under an elite coach” is a necessary condition to win a medal. We also know that Michael has been trained by an elite coach. Note that we don’t know whether he has spent “many hours” under his elite coach. The necessary condition requires “many hours” under an elite coach.

If Michael has spent many hours under the elite coach then he satisfies the necessary condition to win a medal. It is still not sufficient for him to win the

medal, but our question only asks for an assumption – a necessary premise for the conclusion to hold. It does not ask for the flaw in the logic.

Focus on what you are asked and look at answer choice (C):

*(C) Michael's coach trained him for many hours.*

This is a necessary condition for Michael to win a medal. Hence, it is an assumption and therefore, (C) is the correct answer.

Don't worry that the argument is flawed. There could be another question on this argument which asks you to find the flaw in it, however this particular question asks you for the assumption and nothing more.