LSAT PrepTest 29 (October 1999)
Explanations
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Section 1 (first Logical Reasoning)

Please read this first!

I make no guarantees as to your results from using the methods in these explanations.

Most of the methods described in these explanations will work well for most test-takers in most situations, but few methods are perfectly applicable to all situations or all test-takers. Use your judgment.

On the other hand, if you find a method in these explanations challenging to apply, don't give up on it too quickly—give it a fair shot. It is natural for *any* new technique to initially feel unfamiliar and time-consuming. If you keep using the same techniques on the LSAT that you're *already* comfortable with, you can expect to keep getting the same score! If you would like to *change* your LSAT score, the only way to do so is to *change* your LSAT techniques—even though at first any new technique is likely to feel uncomfortable and to slow you down.

PrepTest 29—an actual LSAT, administered in October 1999—is available as part of the Law School Admission Council's *The Next 10 Actual, Official LSAT PrepTests*, which you can buy from amazon.com at this link:
http://www.amazon.com/gp/product/0942639898/sr=8-1/qid=1153896800/ref=pd_bbs_1/002-8086536-1668047?ie=UTF8

These explanations illustrate the techniques described in the "LSAT Guide" available at http://www.geocities.com/freelanceteacher, and, therefore, the explanations should be used in conjunction with that guide. Terms in this font are discussed in the LSAT Guide. Use the LSAT Guide's index to find information on each term.

If you are viewing this document on a computer screen, you can click on any item in the Table of Contents to move directly to that item in the document. Also, clicking the "Bookmarks" tab on the left side of the Adobe Acrobat display will call up the Table of Contents; again, you can click on any item in the Table of Contents to move directly to that item. (To remove the Table of Contents, click the "Bookmarks" tab a second time.)

Abbreviations used in these explanations:

"E" = evidence	"A" = assumption	"√" = "correct choice"
"C" = conclusion	"S" = strengthener	"×" = incorrect choice
"sub-C" = sub-conclusion	"W" = weakener	

A logical reasoning problem has three parts: the "passage", the "Question", and the five choices. For example, on 29.1.4, the "passage" is "Cats spend much of their time sleeping; they seem to awaken only to stretch and yawn. Yet they have strong, agile musculature that most animals would have to exercise strenuously to acquire." The "Question" is "Which one of the following, if true, most helps to resolve the apparent paradox described above?" These explanations capitalize the word "Question" to remind you that it refers to a specific **part** of the problem, rather than to the **whole** problem.

The LSAT tests your ability to simplify and rephrase information, leaving out irrelevant details and subtleties so that you can clarify your thoughts and focus on what *is* relevant. On the other hand, the LSAT also tests your ability to be a close reader—i.e., to pay close attention to the details and subtleties that *are* relevant.

Unfortunately, a detail that appears irrelevant on first glance may turn out to be relevant after all. The solution to this difficulty is to be willing to reread to remind yourself of details you might have forgotten.

These explanations frequently point out inconspicuous details and subtleties that turned out to be helpful or crucial for eliminating incorrect choices or picking the correct choice. Hopefully, this will inspire you to work on developing the skill of **close reading** and a willingness to **reread**.

In addition, these explanations frequently provide **simplifications** and **rephrasings** of the information in the problems, leaving out details that turned out to be irrelevant. Hopefully, you will find that these simplifications make the logic of the problems easier to follow; and, hopefully, this will inspire you to work on developing your own ability to rephrase, using the simplifications in these explanations as models. However, please keep in mind that, if an explanation fails to mention a detail of the problem, that is because the detail *turned out* to be irrelevant—if the choices had been different, that same detail might have turned out to be very relevant. (Also keep in mind that sometimes, to help you better understand the logic behind a *particular* choice—especially the correct choice—the part of the explanation that deals with that choice will present a simplification of the passage that leaves out details which were only relevant to the *other* choices.)

MORAL: The only way to clarify your thoughts and focus on key ideas is to make a habit of simplifying and rephrasing. The only way to make sure your simplification hasn't left out a key idea is to make a habit of close reading and rereading.

COMMENT ON FORMAL LOGIC: There are two ways to attack problems involving formal logic: You can rely on your intuitive *understanding* of formal logic terms, or you can use *mechanical* rules. These explanations demonstrate how to solve formal logic problems by using mechanical rules. If you prefer to rely on your intuitive understanding of logic instead, that's fine—as long as your intuitive understanding is enabling you to solve the questions efficiently and accurately.

These explanations use one *particular* set of mechanical rules. Consult the LSAT Guide for a full description of these rules. Keep in mind, however, that there are other, different mechanical rules that are also valid. If you have learned different mechanical rules for attacking formal logic than the ones described in these explanations, that's fine—as long as your rules are enabling you to solve the questions efficiently and accurately.

1.1

Begin each logical reasoning problem by reading the Question, not the passage. Reading the Question allows you to identify the question type. For #1, the question type is Point at Issue.

It is helpful to describe in general terms what we are expecting from the correct (abbreviated as "√") and incorrect (abbreviated as "×") choices. This process is called classification. Here is how to classify correctness and incorrectness for a Point at Issue question:

√ Choice that the two speakers must have the *different* opinions about
× Choice that the two speakers could have the same opinion about

After reading the Question, we move to the passage.

For most question types it is usually helpful to identify conclusion (the author's main point, which we will abbreviate as "C") and evidence (the author's *support* for their conclusion, which we will abbreviate as "E") in the passage.

This passage contains few signals to help us distinguish conclusion from evidence, so we have to fall back on the principle that the evidence supports the conclusion. The politician's sentence 2 supports their sentence 1, so sentence 1 is their conclusion and sentence 2 is their evidence. (Another clue that sentence 1 is the politician's conclusion is that sentence 1 is somewhat bossy.)

Politician:
E: Smoking causes health problems.
C: It is "reasonable"—i.e., fair—that smokers should pay for the health-awareness campaign.

Smoker:
E: Fatty foods cause just as many health problems as cigarettes.
E: But it would be "unreasonable"—i.e., unfair—to make fatty-food eaters pay for the campaign.
C (implied): So it's also unreasonable to make smokers pay for the campaign.

In the smoker's sentence, the contrast signal "but" confirms what we already knew from the Question—the smoker disagrees with the politician.

The conclusion is defined as "the author's main point; what the author is trying to convince us of." The smoker's main point was implied rather than stated, so we consider it an implied conclusion.

(A) Correct. Clearly the politician thinks that the politician's own proposal is reasonable. And the implied conclusion of the smoker is that the politician's proposal is unreasonable.

Politician:

E: Smoking causes health problems.

C: It is "reasonable"—i.e., fair—that smokers should pay for the health-awareness campaign.

Smoker:

E: Fatty foods cause just as many health problems as cigarettes.

E: But it would be "unreasonable"—i.e., unfair—to make fatty-food eaters pay for the campaign.

C (implied): So it's also unreasonable to make smokers pay for the campaign.

(B) Incorrect. (1) The issue is **who should pay** for the awareness campaign, not **who is more aware** of their habits' effects. (2) The politician says that it is "well established" that cigarettes have harmful effects. The smoker says that it is "**equally** well established" that fatty foods have harmful effects; but the smoker does not try to argue that the harmful effects of fatty foods are **better** established than for smoking. (3) The politician and smoker say that the effects of smoking and fatty foods are "well established," but that doesn't mean that *smokers and fatty-food-eaters* are aware of those well-established effects.

(C) Incorrect. (1) The politician says that smoking causes "**many**" health problems, not that smoking causes **more** health problems than fatty foods do. (2) The issue is how to pay for the health campaign, not the relative dangerousness of cigarettes and fatty foods.

(D) Incorrect. Neither speaker indicates whether smokers would or would not benefit from the health-awareness campaign.

(E) Incorrect. The issue is whether the proposal is "reasonable", which in this context means "fair", not whether the proposal would be "efficient".

Politician:

E: Smoking causes health problems.

C: It is "reasonable"—i.e., fair—that smokers should pay for the health-awareness campaign.

Smoker:

E: Fatty foods cause just as many health problems as cigarettes.

E: But it would be "unreasonable"—i.e., unfair—to make fatty-food eaters pay for the campaign.

C (implied): So it's also unreasonable to make smokers pay for the campaign.

1.2

Question type: The phrase "X's response to Y" indicates a Describe the Argument question.

✓ **Accurately describes the argument**

× **Inaccurately describes the argument**

See the explanation to #1 for a discussion of the passage.

(A) Correct. The counterexample is high-fat, high cholesterol food.

(B) Incorrect. (1) The smoker **criticizes** the politician's proposal, but the smoker gives no **alternative** to the politician's proposal. (2) It is awkward to characterize the politician's proposal as a "solution".

(C) Incorrect. This choice is incorrect for a reason similar to choice E on #1: the smoker criticizes the cigarette tax, not because they think it would be *ineffective* but because they think it's *unfair*.

(D) Incorrect. The "information cited by the politician" is that smoking causes health problems. The smoker does not question the accuracy of this information; they just say that fatty food **also** causes health problems.

(E) Incorrect. (1) The choice has the same weakness as choice C: the smoker criticizes the cigarette tax, not because they think it would be *ineffective* but because they think it's *unfair*. (2) It is awkward to describe funding the campaign as a "problem" in need of a "solution".

1.3

Question type: The word "Except" tells us that #3 is an Except question. The word "strengthens" tells us that #3 is a Strengthen Except question.

To classify correctness and incorrectness for an Except question, we use the Except Method. The Except Method has two steps:

1. Cover up the word "EXCEPT"; whatever's left in the Question will classify **incorrectness**. Write down this classification.

2. To classify correctness, negate your classification for incorrectness. Write down this classification as well.

Here is how to apply the Except Method to #3:

<table>
<tr><td colspan="2">Each of the following, if true, strengthens the argument above EXCEPT:</td><td>Read the Question.</td></tr>
<tr><td colspan="2">Each of the following, if true, strengthens the argument above ~~EXCEPT~~:</td><td>1. Cover up the word "EXCEPT".</td></tr>
<tr><td colspan="2">Each of the following, if true, strengthens the argument above ~~EXCEPT~~:</td><td>"Whatever's left" in the Question will classify incorrectness.</td></tr>
<tr><td colspan="2">× Strengthens the argument.</td><td>Write down this classification.</td></tr>
<tr><td colspan="2">✓ Does <u>not</u> strengthen the argument.</td><td>2. To classify correctness, negate your classification for incorrectness.</td></tr>
<tr><td>✓ Weakens or is irrelevant.</td><td colspan="2">Our classification of correctness is a negative. When convenient, we should rephrase negative statements as positive statements that mean the same thing. (The reason is that positive statements are usually easier to work with than negative statements.) List the possibilities: If the correct choice does not strengthen, then what does it do? There are only two possibilities—namely, "weakening" or "being irrelevant"—so in this case there is a convenient way to rephrase our classification of correctness.</td></tr>
</table>

Irrelevant choices are usually incorrect, but on Except questions they are **correct**. A *common mistake* on Strengthen Except questions is to think that irrelevant choices are **incorrect**.

For normal questions, you would first classify correctness, and then classify the incorrectness. For an Except question, however you first classify **incorrectness**, and then classify correctness. A *common mistake* on Except questions is to first classify **correctness**.

Remember that, for Except questions, you should always write down your classifications of correctness and incorrectness. Here is what we would write for #3:

× **Strengthen**

✓ **Weaken or irrelevant**

× **Strengthen**
✓ **Weaken or irrelevant**

Sentence 1 is somewhat bossy, which indicates that is contains the conclusion. We can simplify a portion of the argument as follows:
E: Gasohol produces *less* carbon dioxide than plants remove
C: Gasohol is better than gasoline.

This portion of the argument commits the flaw of one-sidedness. The *conclusion* deals with **two** options (gasoline and gasohol), but the *evidence* discusses only **one** of the options (gasohol). Once we have identified the flaw, we can construct an assumption (abbreviated as "A") which corrects the flaw by focusing on the neglected option (gasoline).
A: gasoline produces *more* carbon dioxide than plants can remove

We can strengthen by bolstering the assumption. Therefore, we can use our assumption to construct a more detailed classification of correctness and incorrectness:
× **Strengtheners; gasoline produces more carbon dioxide than plants can remove**
✓ **Weakener; gasoline produces less carbon dioxide than plants can remove.**

(E) Incorrect. Choice E matches our classification of incorrectness.

Classifying the passage can help us to improve our classifications of correctness and incorrectness:
Argument: pro-gasohol; anti-gasoline.
× **Strengtheners; pro-gasohol, anti-gasoline.**
✓ **Weakener: anti-gasohol, pro-gasoline; or irrelevant.**

(A) Incorrect. **Anti-gasoline, pro-gasohol.**
(B) Incorrect. **Pro-gasohol.**
(C) Correct. (1) **Anti-gasohol; pro-gasoline.** (2) Because of the word "slightly", choice C may be too mild to be a good weakener. However, if choice C is not a weakener, then it's irrelevant, which would also make it correct.
(D) Incorrect. **Pro-gasohol; anti-gasoline.**

It would be easy to get confused and pick an opposite choice for #3. To defend against this trap we used classification. (1) We used the Except Method to classify correctness and incorrectness, and wrote down those classifications so we wouldn't forget what the Question was asking for. (2) Since the passage dealt with multiple subjects (gasohol and gasoline), we used the Siskel & Ebert Method to classify the passage—i.e., we kept careful track of whether the passage was Thumbs Up (pro) or Thumbs Down (anti) regarding each subject. We applied the Siskel & Ebert Method to the choices as well, again determining whether each choice tended to speak in favor of or against one or both of the options. Again, you might have found it helpful to write down these classifications. MORAL: Classify!

1.4

Question type: Paradox
✓ **Resolves the apparent paradox**
× **Deepens the paradox, or irrelevant**

Paradox questions are one of the two question types where you never look for conclusion and evidence. (The other type is Inference questions.) Instead, on Paradox questions you accept everything in the passage as true facts. You need to identify the facts that are in apparent conflict with each other. The passage will usually have a contrast signal that will help you to find the conflicting facts; for example, #4 contains the contrast signal "yet".

Fact one: Most animals need exercise to get muscular.
Fact two: Cats spend all their time sleeping, stretching, and yawning.
Fact three: Cats are muscular.

The issue is, "How do cats develop their muscles?" The correct choice will provide an answer to this question (without contradicting any of the facts in the passage).

(A) Incorrect. This choice explains why cats sleep a lot, not how cats develop muscles.

(B) Incorrect. Be suspicious of choices with the word "other". Instead of providing an **answer** to "how do cats develop muscles?" this choice introduces an additional **question**: "how do all these *other* animals develop muscles?"

(C) Incorrect. This choice may help to explain why cats are able to sleep a lot, but it does not explain how they develop muscles.

(D) Correct. This choice does answer the question, "How do cats develop muscles?" (Notice that the choice resolved the paradox without contradicting any of the facts in the passage.)

(E) Incorrect. This choice explains how cats **benefit** from muscles, not how cats **develop** muscles.

MORAL: Phrasing the issue as a question helped us to recognize that choices A, B, C, and E were all irrelevant to the issue and that choice D **was** relevant.

1.5

Question type: There are two types of Assumption question: namely, Required Assumption and Guarantee Assumption.

An Assumption question for which the Question **includes** the word "if"…	An Assumption question for which the Question does **not** include the word "if"…
…is a Guarantee Assumption question.	…is a Required Assumption question.

Since the Question includes the word "assumption", #5 is an Assumption question. Since the Question lacks the word "if", #5 is a Required Assumption question.

✓ **(1) Unstated in the passage, but (2) required for the argument to be convincing**

× **Not required for the argument to be convincing**

The conclusion signal "hence" indicates that sentence 2 is the conclusion and that sentence 1 is the evidence. (Consult the LSAT Guide for more info on how Conclusion Signals tell you *both* where the conclusion *and* where the evidence is.)

E1: The new employees' duties are too complex for inexperienced workers.
C1: Their duties should be simplified.

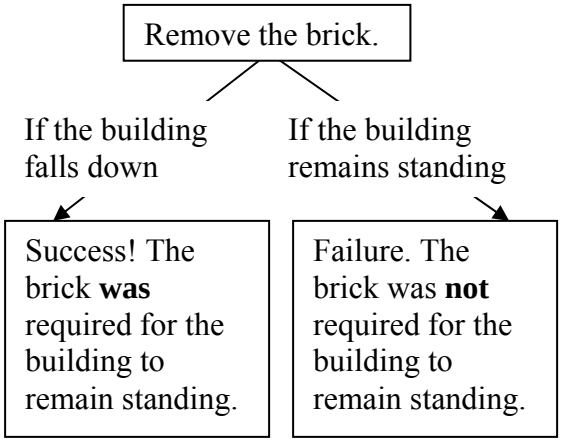
This simplification should make the assumption clear:
A: [a] The new employees are inexperienced.

Explanation for #5 continued on next page …

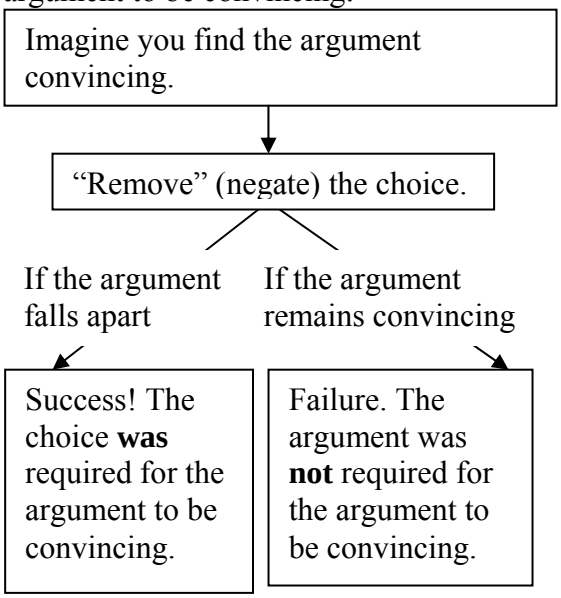
E1: The new employees' duties are too complex for inexperienced workers.
C1: Their duties should be simplified.
A: [a] The new employees are inexperienced.

Statement [a] is certainly unstated in the passage. And [a] does seem to **help** the argument. But is [a] really **required** for the argument to be convincing? The only way to tell is to use the Removal Test.

The Removal Test for bricks—how to find a brick which is **required** to hold the building up:



The Removal Test for choices—how to find a choice which is **required** for the argument to be convincing:



Negation of [a]: [b] The new employees are not inexperienced.	"Remove" (negate) statement [a]. To avoid confusion, you may find it helpful to *write down* the negation.
When we accept [b], the argument **falls apart**.	Since E1 applies only to inexperienced workers, there is now no reason to think that the new workers' duties are too complex. To avoid confusion, you may find it helpful to *write down* the phrase "falls apart."
Success! Statement [a] is a Required Assumption.	When we remove the choice, we want the argument to fall apart.

(C) Correct. Choice C matches [a].

Read closely. The key to #5 was noticing that, while E1 refered to "inexperienced workers", the author never actually said the new employees *were* inexperienced. On the other hand, if you failed to notice this detail on your first reading of the passage, hopefully choice C would inspire you to reread the passage, focusing on the issue of "experience". MORALS: Read closely. Be willing to reread.

E1: The new employees' duties are too complex for inexperienced workers.
C1: Their duties should be simplified.

Of course, the argument also deals with the employees' wages; but as you can see, we were able to detect the assumption without considering this part of the argument:

E2: The new employees' wages are too high for simple tasks.
C2: Their wages should be lowered.

The author's thinking is that the new employees' duties are too complex (E1); so the duties should be simplified (C1); but then their salaries will be too high (E2); so then their salaries should be lowered (C2).

(A) Incorrect. Be suspicious of the word "other". The issue is whether the duties are appropriate for *the two newest* employees; the duties of *other* employees are irrelevant. Therefore, it is irrelevant to compare the duties of the new employees with the duties of other employees.

(B) See next page.

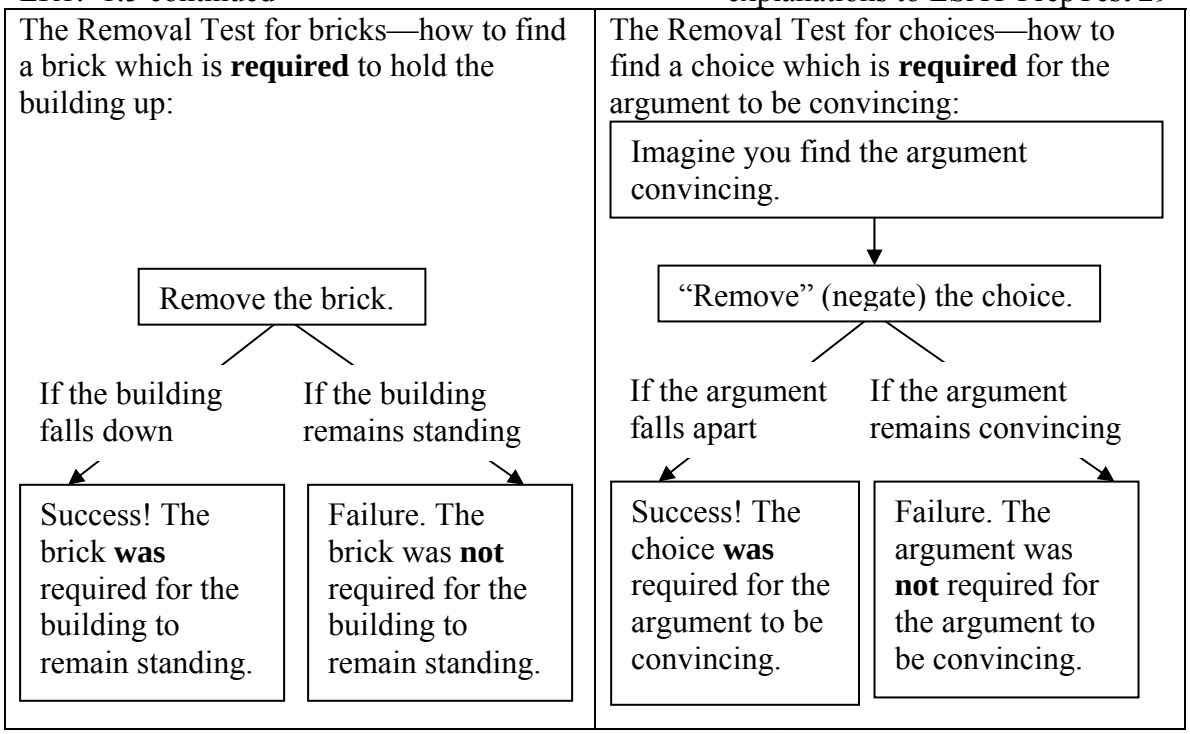
(D) Incorrect. Wrong subject. The subject is the new employees, not Barnes.

(E) Incorrect. (1) Be suspicious of the word "other". The Issue is whether the salaries are **justified**, not whether they're **unusual**, so *other* companies' salaries are irrelevant.

(2) If, despite point 1, we suppose that the other companies' salaries *are* relevant, then the choice becomes an opposite, as you can demonstrate by classification:

Barnes: the new workers' salaries are too high
✓ **Emphasizes the "highness" of the new workers' salaries**
× **Emphasizes the "lowness" of the new workers' salaries**
Choice E: The new workers' salaries are "no higher"; emphasizes the "lowness" of the workers salaries

Explanation for #5 continued on the next page…



E1: The new employees' duties are too complex for inexperienced workers.
C1: Their duties should be simplified.
E2: The new employees' wages are too high for simple tasks.
C2: Their wages should be lowered.

(B) Incorrect. (1) Choice B tells us the **reason** for the new employees' high salaries. The reason for the high salaries, however, is irrelevant to the argument. Remember that we have to accept the evidence. Therefore we have to accept that, whatever the reason for the high salaries is, once the new employees are reassigned to simpler tasks (C1) their salaries will be "too high" (E2) and should be reduced (C2). It doesn't matter whether the reason for the new employees' high salaries is that their current duties are complex, or that they're the boss's kids, or whatever. Whatever the reason for their current salaries, those salaries are "too high" for simple duties. (2) We can use the Removal Test to confirm that choice B is not required.

Negation of choice B: [Ba] There is some *other* reason, besides their complex duties, why the new workers are being paid so much.	"Remove" (negate) choice B. To avoid confusion, you may find it helpful to *write down* the negation.
When we accept [Ba], the argument **remains convincing**.	Just because there is a reason for their high wages doesn't mean it's a *good* reason. And E2 still gives us a a good reason to think that wages are too high. To avoid confusion, you may find it helpful to *write down* the phrase "remains convincing."
Failure. Choice B is not a Required Assumption.	When we remove the choice, we want the argument to fall apart.

1.6

Question type: Since the Question tells us that the correct choice "can be concluded from" the passage, #6 is an Inference question.

✓ **must be true**

× **could or must be false**

Inference questions are one of the two question types where we do not look for conclusion and evidence. (The other question type where you don't look for C and E is Paradox questions.) Instead, we treat everything in the passage as facts—i.e., we have to accept everything in the passage as true.

Sentence 4: Certain aspects of lifestyle affect *blood cholesterol*.

Sentence 2: *Blood cholesterol* affects the risk of fatal heart attacks.

(E) Correct.

Choice E: Certain aspects of lifestyle affect the risk of fatal heart attacks.

Combining sentence 4 and sentence 2 demonstrates that choice E **must** be true. For an Inference question, we should also be attracted to choice E's mild language ("can").

(A) Incorrect. The passage implies that blood cholesterol is **a** major cause of heart attacks (sentences 1 and 2), but the passage does not say that blood cholesterol is the **only** major cause of heart attacks. MORAL: The correct choice for an Inference question is a choice that *must* be true, not just a choice which could be true, or even a choice which is probably true.

(B) Incorrect. This choice is mild ("can"), which is attractive for an Inference question. However, the passage gives no information about the relative effects of heavy vs. moderate smoking.

(C) Incorrect. (1) The passage never discusses "diet"; instead, sentence 3 focuses on other factors that affect blood cholesterol. (2) Be suspicious of the extreme word "principal". The choice distorts sentence 3, which says that **heart disease**, not high cholesterol, is the principal cause of death. It is true that sentence 2 says that blood cholesterol causes heart disease; however, there is no evidence that cholesterol is the **principal** cause of heart disease, so there is no evidence that cholesterol is the **principal** cause of death.

(D) Incorrect. Be suspicious of the extreme word "only". Affecting blood cholesterol is **one** way smoking causes heart disease, but there might be **other** ways too.

1.7

Question type: Flaw

✓ Choice that (1) ***accurately*** **describes the reasoning and (2) describes an aspect of the reasoning that is *flawed*.**

× Choice that (1) ***inaccurately*** **describes the reasoning or (2) describes an aspect of the reasoning that is *not* flawed.**

The conclusion signal "concluded" indicates both that sentence 6 contains the conclusion and that sentence 5 contains part of the evidence. The three order signals—"first," "second," and "third"—indicate three important pieces of evidence.

Trial One is designed to prevent Debbie from using sleight of hand; Trial Two is designed to prevent Debbie from using a trick deck; Trial Three is designed to prevent Debbie from using a planted "volunteer". We can simplify the argument:

E: In Trial One, Debbie didn't use sleight of hand.
E: In Trial Two, Debbie didn't use a trick deck.
E: In Trial Three, Debbie didn't use a planted "volunteer".
E: In all three trials, Debbie was still able to select the correct card.
C: Debbie doesn't use sleight of hand, trick decks, or planted "volunteers" to achieve her effect.

The skeptic is assuming that Debbie used the *same* technique in all three trials. If she always uses the same technique, then we know she's not using sleight of hand, because sleight of hand would have been detected in Trial One. Similarly, Trials Two and Three would have detected if Debbie always relies on trick decks or "plants".

The skeptic's argument is flawed because they didn't notice that Debbie could be *switching* between the various techniques to avoid detection. For example, maybe in Trial One Debbie used a trick deck; maybe in Trial Two, to avoid detection of the trick deck, she switched to a planted "volunteer"; and maybe in Trial Three, to avoid detection of a "plant", she switched back to a trick deck.

	Debbie was prevented from using:	**Debbie could have used:**
first trial	sleight of hand	a trick deck, or a planted "volunteer"
second trial	a trick deck	sleight of hand, or a planted "volunteer"
third trial	a planted "volunteer"	sleight of hand, or a trick deck

(A) Correct. Choice A points out the possibility that Debbie is switching between the various techniques.

E: In Trial One, Debbie didn't use sleight of hand.
E: In Trial Two, Debbie didn't use a trick deck.
E: In Trial Three, Debbie didn't use a planted "volunteer".
E: In all three trials, Debbie was still able to select the correct card.
C: Debbie doesn't use sleight of hand, trick decks, or planted "volunteers" to achieve her effect.

(B) Incorrect. Be suspicious of the word "other". As long as videotaping is **one** effective way to detect sleight of hand, there is no need for the skeptic to search for **other** ways. Therefore, there was no need for the skeptic to consider this possibility.

(C) Incorrect. The skeptic does not need to consider this "possibility", since it is ruled out by Trial One, and by Trial Two.

(D) Incorrect. Be suspicious of the word "other". The skeptic concluded that Debbie **did** use something other than sleight of hand, a trick deck, or a "plant", so it contradicts the passage to say that the skeptic "failed to consider" that possibility; not only did the skeptic "consider" the possibility, they *argued* for it.

(E) Incorrect. Be suspicious of the word "other". Choice E inaccurately implies that the skeptic thinks Debbie's success **was** due to coincidence. Actually, the skeptic only argues about what the success was *not* based on; the skeptic expresses no opinion about what the success *was* based on.

MORAL: Remember to notice the word "other" (choices B, D, and E)—don't pick a choice with the word "other" unless it deals with matters that are actually relevant to the argument.

1.8

Question type: The word "support" can indicate either Inference or Strengthen. Here are the rules for telling the difference between these situations:

Strengthen question	**Inference question**
the correct choice supports the passage = the correct choice strengthens the passage	the correct choice is supported by the passage = the correct choice is implied by the passage
	the passage supports the correct choice = the passage implies the correct choice

Here is how to apply these rules to determine the Question Type for #8.

Which **one of the following** is most strongly supported by the nutritionist's statements?	Read the Question.
Which **choice** is most strongly supported by *the nutritionist's statements*?	"The following" refers to the choices, not to the passage.
Which choice is most strongly supported by *the passage*?	The "nutritionist's statements" are in the passage, not in the choices.
Which choice is most strongly implied by the passage?	It's an Inference question.

✓ **Must be true based on the nutritionist's statements**
× **Could or must be false**

Since #8 is an Inference question, we don't look for conclusion and evidence; instead, we accept all the nutritionist's statements as true facts.

#8 contains opinions from multiple sources (the nutritionist and "many people"). When we encounter multiple sources we should (1) ask whose opinion we're getting in each sentence, and whose opinion the Question is asking about; and (2) use the Siskel & Ebert Method to classify each source's opinion as Thumbs Up (pro) or Thumbs Down (anti).

Sentence 1: Many people: **pro-simple carbs**
Sentence 2: Nutritionist: **anti-simple carbs**
Sentence 3: Nutritionist: **[a] The problem with simple carbs is that they can increase fat.**

We can use our Siskel & Ebert classification of the passage to improve our classification of correctness and incorrectness:
✓ **anti-simple carbs**
× **pro-simple carbs**

Sentence 1: Many people: **pro-simple carbs**

Sentence 2: Nutritionist: **anti-simple carbs**

Sentence 3: Nutritionist: **[a] The problem with simple carbs is that they can increase fat.**

✓ **Must be true based on the nutritionist's statements; anti-simple carbs**

× **Could or must be false; pro-simple carbs**

We should use the Siskel and Ebert Method to classify the choices as well.

(A) Incorrect. (1) Extreme ("avoid" rather than "limit"; compare choice D). (2) Choice A is **anti-simple carbs**, which does match the nutritionist's views. However, choice A gives the wrong **reason** for being "anti-simple carbs". The nutritionist is against simple carbs, not because they lower energy, but because they increase fat. (Compare choice D, which gives the correct reason for being "anti-simple carbs".) (3) Opposite. Sentence 3 suggests that **eating** simple carbs can help *maintain* energy, which implies that **avoiding** carbs might *reduce* energy

(B) Incorrect. The choice is mild ("should not feel compelled"), which is attractive for an Inference. But: (1) Choice B is **anti-low-fat-diet**, not "anti-simple carbs". The issue is whether people should have **high simple carb intake**, not whether they should have **low-fat diets.** (2) Sentence 3 indicates that lots of insulin can increase fat levels, which would tend to *support* the need for a low-fat diet, so choice B is also an opposite.

(C) Incorrect. (1) Choice C is **anti-low-fat-diet**, not "anti-simple carbs". The issue is whether people should have **high simple carb intake**, not whether they should have **low-fat diets**. (2) We can't tell people what they "should" eat until we know what their *goals* are. The passage does suggest that eating both simple carbs and fatty foods could increase body fat; however, that would only be a drawback for **people who wish to avoid** increasing body fat. (Compare choice C with choice D, which *does* specify a dietary goal.)

(D) Correct. (1) Choice D is mild ("limit" rather than "avoid"; compare choice A), which is attractive for an Inference. (2) Choice D is **anti-simple carbs,** which matches our classification of the nutritionist's views. (3) Choice D matches [a]—the problem with simple carbs is that they increase body fat.

Explanation continued on next page …

Sentence 1: Many people: **pro-simple carbs**

Sentence 2: Nutritionist: **anti-simple carbs**

Sentence 3: Nutritionist: **[a] The problem with simple carbs is that they can increase fat.**

✓ **Must be true based on the nutritionist's statements; anti-simple carbs**

× **Could or must be false; pro-simple carbs**

(E) Incorrect. (1) Extreme ("will not", rather than "may not"). (2) Wrong subject. The passage discusses the effect of simple carbs on body **fat**, not on body **weight**.

(3) Let's ignore point 2 and pretend "weight"= "fat".

Choice E: [Ea] Restricting simple carbs will not *lower* fat.	Simplify choice E. Pretend "weight"="fat".
Choice E: [Eb] Eating simple carbs will not *increase* fat.	Statement [Ea] is a double negative. Rephrase the negative as a positive by changing two words ("restricting" and "lower").
Choice E: pro-simple carbs	From [Eb].

The nutritionist is "anti-simple carbs", so choice E is an opposite.

(4) Again, let's ignore point 2 and pretend that fat and weight are the same thing.

Translate sentence 3 into If/then arrow notation (pretend fat=weight): **nutritionist: [Ec] insulin overproduction → eating simple carbs increases weight**
nutritionist: [Ed] insulin overproduction → limiting simple carbs lowers weight Statement [Ed]'s output means the same thing as [Ec]'s output, so [Ed] can be inferred from [Ec].

choice E: [Ee] no insulin overproduction → limiting simple carbs will not lower weight Choice E is too complicated to analyze by using formal logic rules. Instead, you have to use judgment. If you think about choice E carefully, you will hopefully see that [Ee] is an accurate simplification of the meaning of choice E into arrow notation.

Statement [Ee] simply *negates both terms* from [Ed]. But negating both terms of an If/then is a flaw (namely, confusing guarantees and requirements). Therefore, [Ee] cannot be inferred from [Ed]. So, choice E cannot be inferred from the passage. So choice E is incorrect.

It is easier to reject choice E based on point 1 and point 2 than based on point 3, and it is easier to reject choice E based on point 3 than based on point 4. MORAL for choice E: By noticing extreme language and wrong subjects, and by using classification and the Siskel & Ebert Method, you can avoid having to analyze many choices in greater detail.

MORALS for #8: Use the Siskel and Ebert Method to classify! If you find yourself getting confused, write down your classifications.

1.9

Question type: The word "disagree" indicates that #9 is a Point at Issue question.

✓ **Choice which the two speakers must have the same opinion about**
× **Choice which the two speakers could have different opinions about**

The passage contains no signals, so we need other methods to determine conclusion and evidence. The first clause of Jean's sentence 2 is bossy, so that's probably her conclusion.

Jean:
E: Adding a cheap model would increase overall sales…
E: …while allowing the firm to still dominate the high-cost market.
C: The firm should add the cheap model

Tracy:
E: Adding a cheap model will hurt the firm's reputation for quality
Sub-C: **By adding a cheap model, the firm will lose its dominant position in the high-cost market**
Main C: Adding a cheap model could lower overall sales.

There are two related points that Jean and Tracy must disagree about. First, Tracy thinks the cheap model will cost the firm its dominance in the high-cost market; Jean disagrees. Second, Jean thinks the cheap model will definitely lead to increased overall sales, while Tracy disagrees.

(A) Incorrect. (1) Wrong subject. We can't be sure what either Jean or Tracy's opinion about choice A would be. Both Jean and Tracy are concerned with **sales**, not **profits**. (2) Even ignoring point 1, we still couldn't be sure what Jean's opinion about choice A would be. Jean wants to sell the low-cost model **in addition to**, not **instead of**, the high-cost model; Jean never said that the low-cost market is *superior* to the high-cost market.

(B) Incorrect. We can't be sure what Tracy's opinion about choice B would be. Tracy is worried that the cheap model will hurt sales for the full-fare model, not because customers will switch from the full-fare to the cheap model, but because the cheap model will ruin the firm's reputation for quality (Tracy's sentence 1).

Jean:

E: Adding a cheap model would increase overall sales…

E: …while allowing the firm to still dominate the high-cost market.

C: The firm should add the cheap model

Tracy:

E: Adding a cheap model will hurt the firm's reputation for quality

Sub-C**: By adding a cheap model, the firm will lose its dominant position in the high-cost market**

Main C: Adding a cheap model could lower overall sales.

Tracy thinks the cheap model will cost the firm its dominance in the high-cost market; Jean disagrees. Jean thinks the cheap model will definitely lead to increased overall sales, while Tracy disagrees.

(C) Incorrect. (1) The issue is whether the firm will continue to dominate the **high**-cost market, not whether they can dominate the **low**-cost market. (2) We can't be sure what Jean's opinion about choice C would be. Notice the extreme word "dominate": Jean says that the firm can *make sales to* the low-cost market, not that the firm can *dominate* the low-cost market. (3) We can't be sure what Tracy's opinion about choice C would be. Tracy is against the cheap model, not because it would sell poorly, but because it would hurt sales of the full-fare model.

(D) Correct. Jean and Tracy **must** have different opinions about choice D. Jean's sentence 2 shows that Jean **must** disagree with choice D. Tracy's sentence 2 shows that Tracy **must** agree with choice D. Notice that both speakers explicitly addressed the effect of low-cost sales on the high-end market, so we can be almost **sure** of what their opinions about choice D would be.

(E) Incorrect. We can't tell what Tracy's opinion about choice E would be. Tracy is worried, not that the **cheap** model will sell poorly, but that selling the cheap model will cause the **full-fare** model to sell poorly.

This is a question where simply applying the Siskel & Ebert Method is not enough to pick out the correct choice or avoid incorrect choices. It's not enough to know that Jean is "pro-low-cost-model" and Tracy is "anti-low-cost-model"—you have to understand *why* Tracy has qualms about selling the low-cost-model. I.e., you have to consider not only Tracy's conclusion but also her evidence/sub-conclusion. Notice that choice D is the only choice that accurately reflects *why* Tracy is worried about selling the low-cost model.

MORAL: On Point-at-Issue questions, don't forget the evidence.

1.10

Question type: The words "resolve" and "discrepancy" indicate that #10 is a Paradox question.

✓ **Resolves the apparent paradox**

× **Deepens the paradox, or irrelevant**

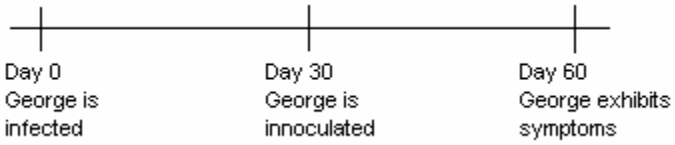
The contrast signal "although" indicates that the two clauses of sentence 3 are the main facts that are in apparent conflict with each other.

Fact 1: ALTHOUGH the vaccine is 100% effective at preventing infection by hepatitis...

Fact 2: ...some people who got the vaccine later displayed symptoms of hepatitis.

The issue is, "If the vaccine is so good, why didn't it prevent everybody who got inoculated from getting hepatitis?" We answer this question by supposing that some people were **already** infected **before** they were inoculated. After all, sentence 1 tells us that, after you're infected, it takes a while before you display symptoms. Some people must have been vaccinated after they'd already been infected, but before the symptoms appeared. Sentence 3 says that the vaccine is completely effective at "preventing" infection **before** it has occurred, not at *reversing* infection **after** it has occurred.

This timeline shows how someone ("George") could get hepatitis even though they were inoculated against it. On Day 30, "George" got inoculated against hepatitis.



The hepatitis vaccine is completely effective at *preventing* infection, but that was no use for George because he had *already* been infected, on Day 0. The reason that George's symptoms didn't appear until **after** he was inoculated is that it takes at least 60 days from infection for someone to display hepatitis symptoms (sentence 1).

(D) Correct. Choice D matches this analysis.

The placebo group is an irrelevant distraction. We don't need to explain how people in the placebo group could get hepatitis, since there's no reason to have expected the placebo to prevent hepatitis in the first place.

(A) (B) (C) Incorrect. These choices are irrelevant to the issue. The issue involves the vaccine, not the placebo.

(E) Incorrect. Sentence 3 says the vaccine is 100% effective at "**preventing** infection" from the disease; the sentence doesn't deal with **recovery** from the disease. The issue is *not* how people in the vaccine group **recovered** from the disease; instead, the issue is how they got **infected** in the first place.

MORAL: On Paradox questions, phrasing the issue as a question can help you to recognize and eliminate choices that are irrelevant to the issue.

1.11

Question type: Main Point
✓ **The author's main point**
× **Not the author's main point**

The author's main point is their conclusion. A *common trap* on Main Point questions is for a choice to be based on the author's evidence.

In sentence 3, the illustration signal "for example" suggests that sentence 2 contains the conclusion. However, in sentence 7, the conclusion signal "thus" suggests that sentence 7 contains the conclusion. So, either sentence 2 is the main conclusion and sentence 7 is the sub-conclusion, or vice-versa. To figure out which is which, remember that the sub-conclusion supports the main conclusion. Ask yourself, "Does sentence 2 support sentence 7, or does sentence 7 support sentence 2?"

Sentence 3 tells us that the author is using plankton as an example to support the idea in sentence 2. Sentence 7 is still talking about the plankton example, so *sentence 7 is also being used to support sentence 2*. Therefore, sentence 7 is a sub-conclusion, and **sentence 2 is the main conclusion**.

Ask whose opinion you're getting in each sentence. In sentence 1 we are getting a view that is "usually assumed" to be correct. In sentence 2, the contrast signal "however" indicates that now we're getting the author's own opinion, and that the author disagrees with the view in sentence 1. In sentence 3, the illustration signal "for example" tells us that sentence 2 contains the conclusion and that sentence 3 contains evidence. By using the phrase "for example", the author is saying, "I just finished giving you my conclusion, in sentence 2. Now, I'm going to give you an example to *support* that conclusion." This supporting example is discussed for the remainder of the passage, sentences 3 through 7.

Usual assumption: Only very evolved species aid their own survival by changing their environment.
Author's C: No, it is common for species in general to aid their own survival by changing the environment.
E: Plankton do it.

(C) Correct. Choice C matches the conclusion we have identified.

(A) (B) (D) (E) All these choices focus on plankton, not on species in general, so they are all referring to the illustrative evidence, not to the conclusion.

MORALS: (1) Illustration signals are a type of evidence signal. Like other evidence signals, illustration signals tell you **both** where the conclusion **and** where the evidence is. (2) A *common trap* on Main Point questions is a choice that focuses on the evidence, rather than the conclusion. Use signals to distinguish the conclusion from the evidence. (3) When there are conflicting signals, like "for example" and "thus" in #11, one of the signals indicates the main conclusion and the other signal indicates a sub-conclusion. To tell which one is which, remember that the sub-conclusion supports the main conclusion.

Usual assumption: Only very evolved species aid their own survival by changing their environment.

Author's C: No, it is common for species in general to aid their own survival by changing the environment.

E: Plankton do it.

1.12

Question type: Describe the Argument

✓ **Accurately describes the argument**

× **Inaccurately describes the argument**

See the explanation for #11 for an analysis of the structure of the argument.

(A) Incorrect. (1) It is awkward to describe sentence 2 as a "general principle"; it would be more accurate to describe it as a "general claim." (2)

Choice A: [Aa] A general statement is being used to support ("justify") a particular claim.	Statement [Aa] is a simplified version of choice A.
Choice A: [Ab] The evidence is general and the conclusion is specific.	The evidence always supports the conclusion, so [Ab] is an accurate simplification of [Aa].

Statement [Ab] inaccurately describes the argument. In the passage, the evidence is specific (about plankton) and the conclusion is general (about species in general).

(B) Incorrect. (1) The view in sentence 1 is "usually assumed"; i.e., people don't **argue** for it, they just take it for granted. Therefore, there is no indication in the passage of any "controversy." (2) The evidence describes how a phenomenon **does** come about, not how it "could" have come about. (3) The conclusion claims that a phenomenon **does** come about, not that it "did" come about. (4) Choice B would be better if it said "An explanation of how a phenomenon does come about in a particular case is given in order to support the claim that this phenomenon commonly occurs in other cases as well."

(C) Incorrect. (1) The evidence examines only **one** case (plankton), not many "case**s**". (2) The conclusion does state that many species can alter their environment, but the conclusion does not discuss the "conditions" under which this process can occur.

(D) Correct. The position being challenged is in sentence 1 ("it is usually assumed that"). The counterexample is plankton. In sentence 2, the illustration signal "for example" tells us that the plankton is being used as an example; and the contrast signal "however" indicates that it's being used as a counterexample to the position in sentence 1.

(E) Incorrect. This choice might be attractive because the words "example" and "illustrate" match the illustration signal "for example" in sentence 2, and because the plankton example is indeed fairly "detailed". However, there is no comparison of alternative "strategies" in the passage.

MORALS: (1) Use signals! Remember how the contrast and illustration signals in the passage supported choice D. (2) Before picking a choice for Describe the Argument questions, make sure that *all* the elements of the choice match the passage. Notice how our explanation for choice D tried to match each element of the choice to the passage. In choice E, the phrase "detailed example" matched the passage, but the word "strategy" did not, so the choice was incorrect.

1.13

Question type: The word "LEAST" indicates that #13 is an Except question; the word "similar" indicates that #13 is a Parallel Reasoning Except question.

The word "LEAST" functions like the word "EXCEPT", so, to classify correctness and incorrectness for an "LEAST" question, we use the Except Method:

1. Cover up the word "LEAST"; whatever's left in the Question will classify **incorrectness**. Write down this classification.

2. To classify correctness, negate your classification for incorrectness. Write down this classification as well.

The pattern of reasoning in the argument above is LEAST similar to that in which one of the following?	Read the Question.
The pattern of reasoning in the argument above is ~~LEAST~~ similar to that in which one of the following?	1. Cover up the word "LEAST".
The pattern of reasoning in the argument above is ~~LEAST~~ *similar* to that in which one of the following?	"Whatever's left" in the Question will classify **incorrectness**.
× **Parallel to the passage**	"Similar"="parallel". Write down this classification.
√ **Not parallel to the passage**	2. To classify correctness, negate your classification for incorrectness.

For Except questions, you should always write down your classification. Here is what we would write for #13:

× **Parallel**
√ **Not parallel**

Explanation continues on next page …

× **Parallel**
✓ **Not parallel**

None of the arguments for #13 contain signals, so we need another tool to identify conclusion and evidence. Remember that the evidence supports the conclusion. In each argument for #13, the second sentence supports the first sentence—so the first sentence is the conclusion and the second sentence is the evidence. (Also, all the first sentences are somewhat bossy, which again indicates that they are conclusions.)

Passage: C: Top priority: attendance E: Teachers etc are useless without attendance	(E) Not parallel; correct. C: top pri: not-guilty verdict E: a not-guilty verdict will allow just release etc
(A) Parallel; incorrect. C: top pri: cust comf E: Hon etc useless w/o cust comf	(B) Parallel; incorrect. C: top pri: food. E: *Know way etc* useless w/o food
(C) Parallel, incorrect. C: top pri: gath evid E: Equip etc useless w/o gath evid	(D) Parallel, incorrect. C: top pri: books E: Staff etc useless w/o books

Suggested written notes that you might take to help you to analyze the passage and choices are illustrated above. Notice the strategies used in these written notes: (1) Abbreviate, but don't over-abbreviate. (2) Use underlining and boxing to highlight key elements of the passage and to make it easier to compare the passage with the choices.

Here is the structure of the passage and incorrect choices:
C: Top priority is X.
E: Q and R are useless we accomplish X.

Here is the structure of choice E:
C: Top priority is X.
E: Accomplishing X will have benefits Q and R.

1.14

Question type: The phrase "vulnerable to criticism" indicates that #14 is a Flaw question. (A *common mistake* is to think that "vulnerable to criticism" indicates a Weaken question.)

√ A **possibility which (1) the prosecutor really did overlook, and which (2) it was a flaw for the prosecutor overlook**

× (1) A **possibility which the prosecutor did take into account, or (2) a possibility which there was no need to take into account**

In sentence 4, the conclusion signal "so" indicates that sentence 3 contains part of the evidence and that sentence 4 contains the conclusion.

E: During the robbery, the moon was out, and it was providing lots of light.
C: During the robbery, there was enough light to make a reliable ID.

The argument *assumes* that: **The moonlight was not blocked by clouds.**

The argument *overlooks* the possibility that: [a] **The moonlight was blocked by clouds.**

(E) Correct. Choice (E) matches [a].

(A) Incorrect. (1) The prosecutor never said that it was **Klein** who determined the time of the robbery. (2) The evidence says that the time has been determined "conclusively." We have to accept the evidence.

(B) (C) Incorrect. Irrelevant to the issue. Choices B and C describe possibilities which the prosecutor did indeed "overlook". However, it was not a **flaw** to overlook these possibilities, because the possibilities are irrelevant to the issue. The issue is not: "Did Klein make a reliable ID?" Instead, the issue is, "Was there 'enough light' for Klein to make a reliable ID?" Notice that choice E **is** relevant to the actual issue.

MORAL: Read closely in order to clearly identify the actual issue. Don't let the actual issue get distorted in your mind into a subtlely different issue. Remember that it can be helpful to phrase the issue as a question.

(D) Incorrect. Yuge never said that the light **was** "sufficient" for a reliable ID; he just said that the moon was providing "considerable" light (sentence 2). It is the prosecutor, not Yuge, who claims that the light was sufficient ("enough") for a reliable ID (sentence 4).

1.15

Question type:

An Assumption question for which the Question **includes** the word "if"…	An Assumption question for which the Question does **not** include the word "if"…
…is a Guarantee Assumption question.	…is a Required Assumption question.

Since the Question includes the word "assumption," #15 is an Assumption question. Since the Question lacks the word "if", #15 is a Required Assumption question.

✓ A **choice which is (1) unstated in the passage, but which is (2) required for the argument to be convincing**

× A **choice which is not required for the argument to be convincing**

In sentence 3, the evidence signal "since" indicates that the first clause of sentence 3 contains part of the evidence, and that the second clause of sentence 3 contains the conclusion. (Evidence signals tell you **both** where the conclusion **and** where the evidence is: the clause **directly** after the evidence signal is the evidence, and the other clause in the sentence is the conclusion.)

E1: Cerebral edema can be fatal if mistreated.
E2: Cerebral edema and mountain sickness have similar symptoms.
E3: Mountain sickness is common at high altitudes.
C: Getting cerebral edema is *particularly* dangerous at high altitudes.

The author's thinking is that, at high altitudes, cerebral edema is likely to be **misdiagnosed** as mountain sickness and, therefore, **mistreated**.

(A) Explanation on next page.
(B) Incorrect. This choice does not help the argument, since, although it describes a danger from cerebral edema, it gives no reason to think that edema is "especially" dangerous at high altitude.
(C) Incorrect. The argument is assuming that edema and mountain sickness have different **treatments** (choice A), not that they have different **mechanisms** (choice C).

Explanation for #15 continued on the next page …

E1: Cerebral edema can be fatal if mistreated.
E2: Cerebral edema and mountain sickness have similar symptoms.
E3: Mountain sickness is common at high altitudes.
C: Getting cerebral edema is *particularly* dangerous at high altitudes.

The author's thinking is that, at high altitudes, cerebral edema is likely to be **misdiagnosed** as mountain sickness and, therefore, **mistreated**.

(A) Correct.

Let's use the Removal Test to show that choice A really is *required*.

<table>
<tr>
<td>The Removal Test for bricks—how to find a brick which is required to hold the building up:

Remove the brick.

If the building falls down → Success! The brick was required for the building to remain standing.

If the building remains standing → Failure. The brick was not required for the building to remain standing.</td>
<td>The Removal Test for choices—how to find a choice which is required for the argument to be convincing:

Imagine you find the argument convincing.

“Remove” (negate) the choice.

If the argument falls apart → Success! The choice was required for the argument to be convincing.

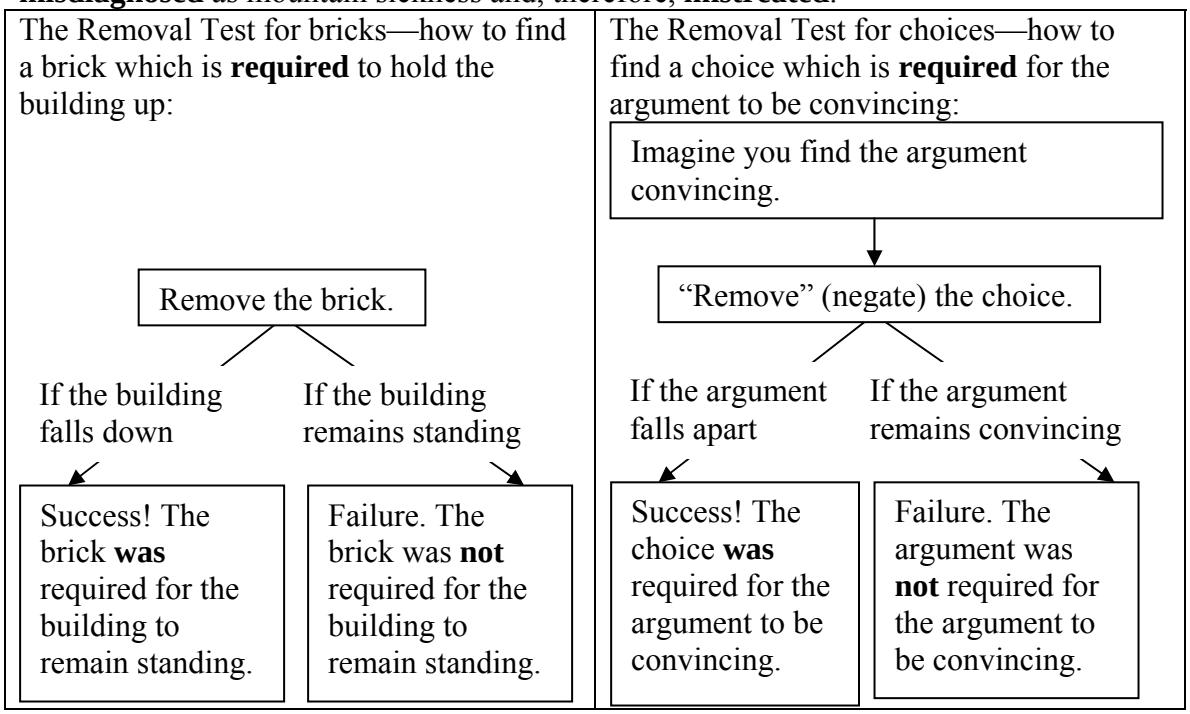
If the argument remains convincing → Failure. The argument was not required for the argument to be convincing.</td>
</tr>
</table>

Negation of choice A: [Aa] The treatments for mountain sickness and cerebral edema do not differ.	First, negate (“remove”) statement [a].
Negation of choice A: [Ab] The treatments for mountain sickness and cerebral edema are the same.	Statement [Aa] is a double negative (“do not differ”). Rephrase the negative as a positive. “Not different”=”the same”. To avoid confusion, it might help to write down the negation.
When we accept [Ab], the argument **falls apart**.	Now it doesn't matter if cerebral edema is misdiagnosed as mountain sickness, since the treatment is the same either way. To avoid confusion, it might help to write down the phrase “falls apart.”
Success! Choice A is a Required Assumption.	When we remove the choice, we want the argument to fall apart.

.

E1: Cerebral edema can be fatal if mistreated.
E2: Cerebral edema and mountain sickness have similar symptoms.
E3: Mountain sickness is common at high altitudes.
C: Getting cerebral edema is *particularly* dangerous at high altitudes.

The author's thinking is that, at high altitudes, cerebral edema is likely to be **misdiagnosed** as mountain sickness and, therefore, **mistreated**.



(D) Incorrect.

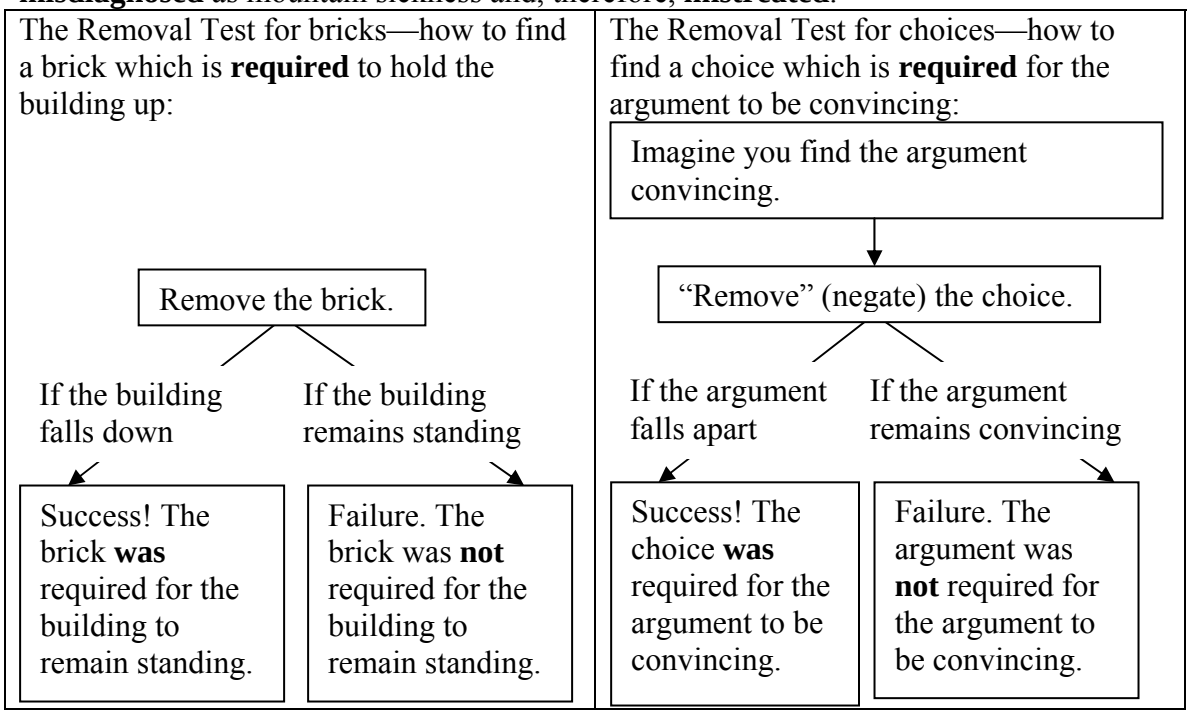
Choice D: [Da] People have poor judgment at high altitudes.

(1) Choice D may be **helpful** to the argument, since it gives a reason why cerebral edema might be misdiagnosed at high altitude. But choice D is not **required** for the argument to be convincing. The author thinks that high-altitude edema will be mistaken for mountain sickness, not because people's high-altitude judgment is especially poor, but because at high altitude *genuine* cases of mountain sickness are common. (2) Use the Removal Test to confirm that [Da] is NOT required for the argument to be convincing:

Negation of choice D: [Db] People do not have poor judgment at high altitude.	"Remove" (negate) statement [Da].
Negation of choice D: [Db] People have normal judgment at high altitude.	Statement [Db] is a double negative ("not poor"). Rephrase the negative as a positive. "Not poor"="normal".
When we accept [Db], the argument **remains convincing**.	At high altitudes, genuine cases of mountain sickness are especially common (E3), so it is especially easy, even for someone with *normal* judgment, to misdiagnose a case of edema as a case of mountain sickness.
Failure. Choice D is NOT a Required Assumption.	When we remove the choice, we want the argument to fall apart.

E1: Cerebral edema can be fatal if mistreated.
E2: Cerebral edema and mountain sickness have similar symptoms.
E3: Mountain sickness is common at high altitudes.
C: Getting cerebral edema is *particularly* dangerous at high altitudes.

The author's thinking is that, at high altitudes, cerebral edema is likely to be **misdiagnosed** as mountain sickness and, therefore, **mistreated**.



(E) Incorrect. (1) This choice indicates, not that edema **is** especially dangerous, but that mountain sickness is **not** very dangerous. (2) You might argue that choice E is **helpful** to the argument, since it suggests that, if a case of edema is misdiagnosed as a case of mountain sickness, the patient may end up receiving no treatment at all. However, choice E is not **required** for the argument to be convincing. The author is assuming that high-altitude edema patients will receive the *wrong* treatment, not that they will receive *no* treatment at all. (3) Use the Removal Test:

Negation of choice E: [Ea] Most people with mountain sickness cannot recover without special treatment.	First, negate ("remove") choice E.
Negation of choice E: [Eb] Most people with mountain sickness do need special treatment to recover.	Statement [Ea] is a double negative ("not without"). Rephrase it as a positive. (It might help to *write down* the negation.)
When we accept [Eb], the argument **remains convincing**.	Now when people with edema are misdiagnosed as having mountain sickness, they *will* receive treatment. However, they will be receiving the treatment for mountain sickness, not for edema, so (E1) it is still convincing that their edema will quickly become life threatening.
Failure. Choice E is NOT a Required Assumption.	When we remove the choice, we want the argument to fall apart.

1.16

Question type: Weaken
✓ **Weakens the argument**
× **Strengthens the argument, or irrelevant**

In Sentence 2, the conclusion signal "thus" indicates that sentence 1 contains evidence, and that the first clause of sentence 2 contains the conclusion. Also in sentence 2, the evidence signal "because" confirms that the first clause of sentence 2 contains the conclusion, and furthermore indicates that the remainder of sentence 2 contains evidence.

E: Proto-Indo-Europeans' language lacked the word "sea".
C: Proto-Indo-Europeans' living conditions lacked actual seas.

(The author has another conclusion as well—that the climate was cold—but it turns out that that conclusion is not relevant to the correct choice.)

(B) Correct. The mild word "some" is unusual for a correct weakener, but the extreme word "prominent" makes the choice somewhat less mild. (1) Choice B suggests that the Proto-Indo-Europeans might be a people who lacked a word for "sea" (consistent with the evidence), but who still did have actual seas in their environment (contradicting the conclusion), so choice B does weaken the argument.

(2) Here is a more formal way to demonstrate that choice B is a weakener:

The argument commits the flaw of changing the subject—the conclusion is about a people's living conditions, but the evidence changes the subject to their language. Using arrow notation, construct an assumption that connects the two subjects: **A: [Ba] Lack word for X in your language → lack actual X's in your living conditions**
We can weaken by attacking an assumption, so we will construct a Weakener (abbreviated as "W") by negating [Ba]. To negate an If/then, we: 1. Change the If/then into a Some. 2. Negate the second term. **W: [Bb] Some peoples who lack a word for X in their language … *do not lack* actual X's in their living conditions.**
Statement [Bb] is confusing because it is a double negative ("do not lack"). Rephrase the negative as a positive ("do not lack"= "have"): **W: [Bc] Some peoples who lack a word for X in their language … *have* actual X's in their environment.**

Choice B matches [Bc], so choice B is a good weakener.

E: Proto-Indo-Europeans' language lacked the word "sea".
C: Proto-Indo-Europeans' living conditions lacked actual seas.

(A) Incorrect. (1) Choice A does not seriously weaken the argument because, even if the Proto-Indo-Euros were familiar with fish, the Proto-Indos might well have obtained the fish from lakes or rivers, or from trade, rather than from direct contact with an "ocean or sea". (2) Another reason choice A is a poor weakener is that the choice does not address the **evidence**. We have to accept the evidence, so we have to accept that the Proto-Indos had no word for "sea". The author explains this strange aspect of the Proto-Indos language by concluding that there were no seas around for them to talk about. Choice A gives no **alternative** explanation for why the language lacked a word for "sea", so it fails to seriously weaken the author's argument. Compare choice B, which **does** address the author's evidence.

MORAL: A good weakener usually weakens the conclusion by responding to the evidence, not by ignoring the evidence. Don't forget the evidence.

(C) Incorrect. Choice C is extreme ("no"), which is attractive for a weaken question. But: (1) Wrong subject. The argument is about "vanished cultures", not cultures that exist "today". MORAL: Pay attention to time clues. (2) Choice C contains a double negative: "**no** languages that *lack*". Rephrase the negative as a positive: "**All** known languages today *possess* a word for 'sea'." Again, this information about present languages is not relevant to a very old culture like the Proto-Indo-Euros. Because of modern communications, peoples nowadays are likely to be familiar with seas even if they don't live near a sea themselves.

(D) Incorrect. This choice does not seriously weaken the conclusion that the Proto-Indos lived in a cold climate. Just because a language has a word for "heat" is no indication that the climate is generally hot. The Proto-Indos could easily be familiar with the concept of "heat" and need a word for it, even if they were cold most of the time.

(E) Incorrect. (1) Wrong subject. The argument is about the Proto's **environment** ("living conditions"), not about their **lifestyle**. (2) You might argue that a nomadic (i.e., migrating) people would be more likely to encounter a sea, weakening the argument. However, choice E is not an effective weakener because it doesn't respond to the author's linguistic evidence: If the nomads **did** encounter seas, why didn't they have a word for them? Compare choice B, which *does* respond to the linguistic evidence.

MORAL: A good weakener usually weakens the conclusion by responding to the evidence, not by ignoring the evidence. Don't forget the evidence.

1.17

Question type: The phrase "vulnerable to criticism" indicates that #17 is a Flaw question. (A *common mistake* is to think that "vulnerable to criticism" means Weaken.)

✓ **(1) Accurately describes the reasoning, and (2) describes an aspect of the reasoning which is *flawed*.**

× **(1) *Inaccurately* describe the reasoning, or (2) describes an aspect of the reasoning which is *not* flawed.**

Since #17 has no conclusion or evidence signals, we will have to use some other method to identify the conclusion and evidence. Remember that the evidence supports the conclusion. Ask yourself, "Does sentence 1 support sentence 2, or does sentence 2 support sentence 1?" Sentence 2 supports sentence 1, so sentence 2 is the evidence and sentence 1 is the conclusion:

E: We can't tell if any particular case of cancer is caused by radiation.

C: We can't tell if an increase in cancer rates is caused by radiation.

The argument commits the flaw of changing the subject: The evidence is about particular cases, but the conclusion is about cancer rates.

(A) Correct. This choice accurately points out the change of subject. "Individual causes" refers to the particular cases in the evidence, while "statistical evidence" refers to overall cancer rates discussed in the conclusion.

The wrong choices for #17 are confusing. But once you were confident that choice A is correct, you could spend much less time during the test trying to figure out what's wrong about the other choices. MORAL: Recognizing the flaw of changing the subject can save you time during the test.

Explanation continues on next page …

E: We can't tell if any particular case of cancer is caused by radiation.
C: We can't tell if an increase in cancer rates is caused by radiation.

(B) Incorrect. The choice inaccurately describes the argument. The columnist says, not that the increase in cancer rates "was caused by" radiation, but that the increase in rates possibly **was not** caused by radiation.

Choice B would be correct for the following argument:

Argument B
E: Lax radiation standards were followed by increased cancer rates
C: The lax standards caused the increase in cancer rates.

(C) Incorrect. Choice C does not accurately describe either the columnist's evidence or conclusion. Although the columnist's evidence does contain the phrase "a particular case of cancer", the columnist does not actually "draw evidence from a particular case of cancer". And the columnist's conclusion is not about the general causes of cancer.

Choice C would be correct for the following argument:

Argument C
E: Bob's cancer was not caused by radiation.
C: Cancer is not caused by radiation.

Unlike the columnist's argument, Argument C **does** "draw evidence from a particular case of cancer"—namely, from Bob's case. Furthermore, unlike the columnist's conclusion, Argument C's conclusion **is** about the general causes of cancer.

(D) Incorrect. Choice D inaccurately describes the argument. Be suspicious of the word "other". The argument does not **ignore** but is **based on** the possibility of other, alternative causes (toxins, smoking, diet, genetics). And if there are even *more* alternatives to radiation which the author did ignore, that would only strengthen, not weaken, the argument. Choice D would be correct for Argument B.

(E) Incorrect. Choice E inaccurately describes the argument. The columnist does say that there is **no evidence** for a causal connection (sentence 1), but the columnist never says that there is **no** causal connection.

Choice E would be correct for the following argument:

Argument E
E: [Ea] There is no evidence for the claim that radiation caused the increase in cancer rates.
C: [Eb] The claim that radiation caused the increase in cancer rates is false.

In sentence 1, the columnist does say [Ea]. However, [Ea] is the columnist's conclusion, not the columnist's evidence. The columnist never says [Eb].

1.18

Question type: The phrase "must be true" indicates that #18 is an Inference question.

√ **Must be true**

× **Could or must be false**

Since #18 is an Inference question, we don't look for conclusion and evidence. Instead, we accept everything in the passage as true facts.

Sentence 1 (translated into ellipsis notation): **[a] Some plan com mem who rep con ind ... sig fin int plan com dec**	
Reverse [a] (it is legal to reverse a Some): **[b] Some sig fin int plan com dec ... plan com mem who rep con ind**	
No one who is on plan com ... lives burbs	First clause of sentence 2.
Then not one who is on plan com ... *lives burbs*	No = then not
[c] *Lives burbs* → not plan com mem	convert into arrow notation
[d] plan com mem → not live burbs	contrapositive
[e] Many com mem ... work burbs	Second clause of sentence 2.

[a] Some plan com mem who rep con ind ... sig fin int plan com dec
[b] Some sig fin int plan com dec ... plan com mem who rep con
[c] Live burbs → not plan com mem
[d] Plan com mem → not live burbs
[e] Many com mem ... work burbs

We have translated the Somes and Many into ellipsis notation.

There are three ways to attack this problem:

I. Guessing. Choices A and B are extreme ("no") and choices C, D, and E are mild ("some"). Remember that mild choices are more attractive Inferences. Because the passage has some extreme language, it is possible that the correct inference for Question 18 **might** have been extreme. Nevertheless, if you had to guess, it would still be better to guess one of the mild choices, especially since the passage has some mild language as well.

II. We can draw inferences from the passage, and then look to see whether any of the choices match the inferences we drew.

III. We can check each choice to see whether we can infer it from the passage. Since the mild choices—choices C, D, and E—are more likely to be correct, you might want to check them *first*, before checking choices A and B.

We will now solve the problem, first using Option II, then using Option III.

[a] Some plan com mem who rep con ind ... sig fin int plan com dec
[b] Some sig fin int plan com dec ... plan com mem who rep con
[c] Live burbs → not plan com mem
[d] Plan com mem → not live burbs
[e] Many com mem ... work burbs

Let's solve #18 by using Option II—i.e., drawing inferences from the passage and then looking to see whether any of the choices match the inferences we drew. Here is a method for drawing inferences by combining Somes and If/thens:

1. Reverse all the Somes in the passage. Take the contrapositive of all the If/thens in the passage.
2. Choose a fact to Start with.
3. Add an If/then whose first term is the same as the second term of the previous fact.
4. You can repeat Step 3 until you reach a DEADEND.

We've already completed step 1.

Start [a] Some plan com mem who rep con ind ... sig fin int plan com dec *Add* DEADEND ←
DEADEND: None of the If/thens in the passage has a first term which is the same as [a]'s second term ("have significant financial interests in the planning committee's decisions").

[f] Some sig fin int plan com dec ... plan com mem From [b]. You can infer a general Some from a specific Some, so we can infer [f] (about "planning committee members" in general) from [b] (about a specific group of planning committee members—"those representing construction").	
Start [f] Some sig fin int plan com dec ... plan com mem *Add* [d] plan com mem → not live burbs *Result* [g] Some sig fin int plan com dec ... not live burbs	Statement [g] is a valid inference from the passage.
[h] Some not live burbs ... sig fin int plan com dec	Reverse [g].

TRAP: Choice C is a trap for people who try to Start with [f] and Add [e]. Remember: You can only Add If/thens. You cannot Add Manys.

Start [e] Many com mem ... work burbs *Add* DEADEND ←	DEADEND: None of the If/thens in the passage has a first term which is the same as [e]'s second term ("work in the suburbs").

We obtained two valid inferences from the passage: [g] and [h].

(E) Correct. Choice E matches [g].

To infer choice E we used these tools: (1) Reversing a Some (to get [b]). (2) Inferring a general Some from a specific Some (to get [f]). (3) Converting a No statement into arrow notation (to get [c]). (4) Taking a contrapositive (to get [d]). (5) Combining a Some and an If/then (to get [g]).

explanation for #18 continued on next page…

[a] Some plan com mem who rep con ind ... sig fin int plan com dec
[b] Some sig fin int plan com dec ... plan com mem who rep con
[c] Live burbs → not plan com mem
[d] Plan com mem → not live burbs
[e] Many com mem ... work burbs

Now let's solve #18 by using Option III—i.e., checking each choice to see if it can be validly inferred from the passage. Here is a systematic method for checking whether a Some or an If/then is a valid inference:

1. Reverse all the Somes in the passage. Take the contrapositive of all the If/thens in the passage.
2. Start with a fact which has the same first term as the choice, and which is at least as extreme as the choice.
3. Add an If/then whose first term is the same as the second term of the previous fact.
4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the choice.
5. If the choice is a Some, you need to try to infer both the choice and its reverse. If the choice is an If/then, you do not need to try to infer the choice's contrapositive.

(A) Incorrect. (1)

No sig fin int plan com dec ... not in con ind	Choice A.
Then not sig fin int plan com dec ... not in con ind	No = then not
[Aa] not in con ind → no sig fin int plan com dec	convert into arrow notation

Choice A: [Aa] not in con ind → no sig fin int plan com dec

Try to infer [Aa] from the facts in the passage.

Start DEADEND *Result* [Aa] not in con ind → no sig fin int plan com dec
DEADEND: None of the facts in the passage has the same first term as [Aa] ("not in the construction industry").

So we cannot infer [Aa] from the passage. So we can't infer choice A from the passage. So choice A is incorrect. (2) Wrong subject. Sentence 1 is about people who **represent** the construction industry, not people who are **in** the construction industry.

TRAP: Here's some *mistaken* reasoning that could make choice A *seem* valid:

[Ab] Some sig fin int plan com dec ... rep con From [b]. It is valid to infer a general Some from a specific Some.	
[Ac] sig fin int plan com dec → rep con Statement [Ab] is a ***FLAWED*** inference from [b]. You cannot draw an extreme inference from mild facts, so you cannot infer an If/then (extreme) from a Some (mild).	
[Ad] not in con ind → no sig fin int plan com dec	Contrapositive of [Ac].

If you pretend that "in construction"= "represents construction", then Statement [Ad] matches [Aa] (choice A). So, this *mistaken* reasoning makes choice A *seem* valid.

MORAL: You cannot draw an extreme inference from mild facts.

[a] Some plan com mem who rep con ind ... sig fin int plan com dec
[b] Some sig fin int plan com dec ... plan com mem who rep con
[c] Live burbs → not plan com mem
[d] Plan com mem → not live burbs
[e] Many com mem ... work burbs

2. Start with a fact which has the same first term of as choice, and which is at least as extreme as the choice.

3. Add an If/then whose first term is the same as the second term of the previous Fact.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the choice.

5. If the choice is a Some, you need to try to infer both the choice and its reverse. If the choice is an If/then, you do not need to try to infer the choice's contrapositive.

(B) Incorrect.

No sig fin int plan com dec ... lives burbs	Choice B.
Then not sig fin int plan com dec ... lives burbs	No = then not
[Ba] Lives burbs → no sig fin int plan com dec interests	convert into arrow notation

Choice B: [Ba] lives burbs → no sig fin int plan com dec

Try to infer [Ba] from the facts in the passage:

Start [c] live burbs → not plan com mem *Add* DEADEND *Result* [Ba] lives burbs → no sig fin int plan com dec	DEADEND: None of the If/thens in the passage has a first term that is the same as [c]'s second term ("not a planning committee member").

So we can't infer [Ba] from the passage. So we cannot infer choice B from the passage. So choice B is incorrect.

TRAP: Here is some *mistaken* reasoning that could make choice A *seem* like a valid inference.

[Bb] Some sig fin int plan com dec ... plan com mem	From [b]. It is valid to infer a general Some from a specific Some.
Start [Bb] *Some sig fin int plan com dec ... plan com mem *Add* [d] Plan com mem → not live burbs *Result* [Bc] sig fin int plan com dec → not live burbs	*This step is **flawed**. You cannot infer extreme conclusions from mild evidence, so we cannot infer [Bc] (an extreme If/then) from [Bb] (a mild Some).
[Bd] live burbs → not sig fin int plan com dec	Contrapositive of [Bc].

Statement [Bd] matches [Ba], so we have shown how someone might **mistakenly** infer choice B from the passage.

MORAL: You cannot draw an extreme inference from mild facts. …

[a] Some plan com mem who rep con ind ... sig fin int plan com dec
[b] Some sig fin int plan com dec ... plan com mem who rep con
[c] Live burbs → not plan com mem
[d] Plan com mem → not live burbs
[e] Many com mem ... work burbs

2. Start with a fact which has the same first term of as choice, and which is at least as extreme as the choice.

3. Add an If/then whose first term is the same as the second term of the previous Fact.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the choice.

5. If the choice is a Some, you need to try to infer both the choice and its reverse. If the choice is an If/then, you do not need to try to infer the choice's contrapositive.

(C) Incorrect.
Choice C: [Ca] Some sig fin int plan com dec ... work burbs
Choice C reversed: [Cb] Some work burbs ... sig fin int plan com dec

Try to infer [Ca] from the passage.

[Cc] Some sig fin int plan com dec ... plan com mem
From [b]. Statement [b] is about a specific type of committee member (those who represent construction). Statement [Cc] is about committee members in general.
It's valid to infer a general Some from a specific Some.

Start [Cc] Some sig fin int plan com dec ... plan com mem *Add* [d] plan com mem → not live burbs *Add* DEADEND *Result* [Ca] Some sig fin int plan com dec ... work burbs	DEADEND: There is no If/then in the passage whose first term is the same as [d]'s second term ("do not live in the suburbs").

The TRAP is to Start with [Cc] and try to Add [e]. Remember: You can only Add If/thens; you can**not** Add Manys.

So we can't infer [Ca] from the passage. Next, try to infer [Cb].

Start DEADEND *Result* [Cb] Some work burbs ... sig fin int plan com dec	DEADEND: None of the facts in the passage has the same first term ("work in the suburbs") as [Cb].

So we cannot infer [Ca] or [Cb] from the passage. So we can't infer choice C from the passage. So choice C is incorrect.

[a] Some plan com mem who rep con ind ... sig fin int plan com dec
[b] Some sig fin int plan com dec ... plan com mem who rep con
[c] Live burbs → not plan com mem
[d] Plan com mem → not live burbs
[e] Many com mem ... work burbs

2. Start with a fact which has the same first term of as choice, and which is at least as extreme as the choice.

3. Add an If/then whose first term is the same as the second term of the previous Fact.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the choice.

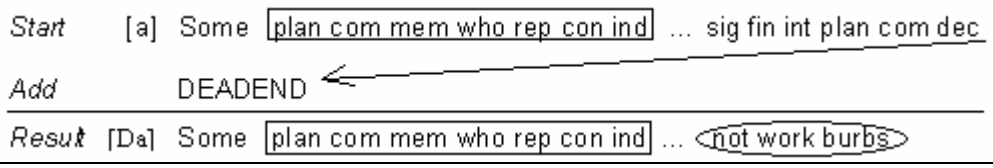
5. If the choice is a Some, you need to try to infer both the choice and its reverse. If the choice is an If/then, you do not need to try to infer the choice's contrapositive.

(D) Incorrect.

Choice D: [Da] **Some plan com mem who rep con ind ... not work burbs**

Choice D reversed: [Db] **Some not work burbs ... plan com mem who rep con ind**

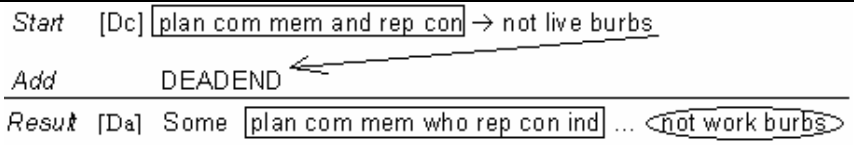
Try to infer [Da].



DEADEND: None of the If/thens in the passage has a first term which is the same as the second term of [a] ("have significant financial interests in the planning committee's decisions").

Try again to infer [Da]:

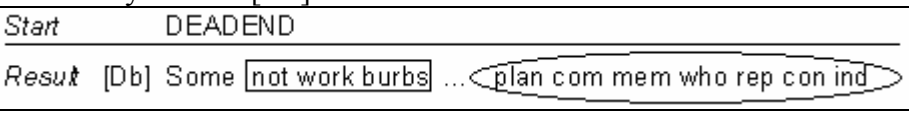
[Dc] plan com mem and rep con → not live burbs
From [d]. "X → Y" implies "(X and Q) → Y."



DEADEND: There is no If/then in the passage whose first term is the same as [Dc]'s second term ("does not live in the suburbs").

So we can't infer [Da].

Try to infer [Db]:



DEADEND: None of the facts from the passage has the same first term as [Db] ("do not work in the suburbs").

So we can't infer [Da] or [Db] from the passage. So we can't infer choice D from the passage. So choice D is incorrect.

[a] Some plan com mem who rep con ind ... sig fin int plan com dec
[b] Some sig fin int plan com dec ... plan com mem who rep con
[c] Live burbs → not plan com mem
[d] Plan com mem → not live burbs
[e] Many com mem ... work burbs

2. Start with a fact which has the same first term of as choice, and which is at least as extreme as the choice.

3. Add an If/then whose first term is the same as the second term of the previous Fact.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the choice.

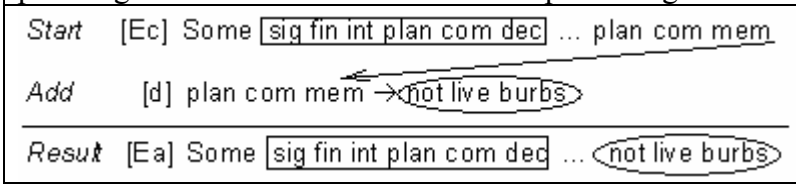
5. If the choice is a Some, you need to try to infer both the choice and its reverse. If the choice is an If/then, you do not need to try to infer the choice's contrapositive.

(E) Correct.
Choice E: **[Ea] Some sig fin int plan com dec ... not live burbs**
Choice E reversed: **[Eb] not live burbs ... sig fin int plan com dec**

Try to infer [Ea].

[Ec] Some sig fin int plan com dec ... plan com mem

From [b]. We can infer a general Some from a specific Some, so we can infer [Ec] (about "planning committee members" in general) from [b] (about a specific group of planning committee members—"those representing construction").



This is a valid argument.

So we **can** infer [Ea] from the passage. So we can infer choice E from the passage. So choice E is correct.

In order to infer choice E from the passage we used the following techniques: (1) Reversing a Some (to get [b]). (2) Inferring a general Some from a specific Some (to get [Ec]). (3) Converting a No statement into arrow notation (to get [c]). (4) Taking a contrapositive (to get [d]). (5) Combining a Some and an If/then (to infer [Ea] from the passage). MORAL: Try to get comfortable with these five techniques.

1.19

Question Type: Principle
✓ A **principle which underlies the arbitrator's argument**
× N**ot a principle which underlies the arbitrator's argument**

The passage contains opinions from multiple sources (the manager and the arbitrator). Ask whose opinion you're getting in each sentence.

Sentence 3 contains three clauses ("He blames … time", "but he … blame", and "for he … contingency"). Sentence 2 and the first clause of sentence 3 give the manager's opinion ("he also claims", "he blames"). In sentence 3, the contrast signal "but" indicates that the second and third clauses give the *arbitrator's* opinion, and that the arbitrator (partially) disagrees with the manager. The evidence signal "for" in sentence 3 indicates that the second clause contains the arbitrator's conclusion, and that the third clause contains evidence. (Remember that evidence signals tell you **both** where the evidence **and** where the conclusion is.)

Manager's C: The contractor is to blame for the delay.
Arbitrator's C: The manager is also to blame for the delay.
Arbitrator's E: The manager knew the contractor was likely to be behind schedule and should have planned for it.

(A) Correct. Choice A connects the arbitrator's evidence to their conclusion. The arbitrator's evidence does indicate that the problem was "foreseeable". And the passage does describe the manager as "making decisions" (sentence 1).

(B) Incorrect. Choice B tends to put the blame on the contractor, not on the manager, so it tends to support the **manager's** argument, not the arbitrator's argument.

(C) Incorrect. Choice C is irrelevant to the evidence. The criticism is not that the manager should have *prevented* the delay, but that he should have "planned" for it.

(D) Incorrect. (1) We should be suspicious of the extreme word "directly". There is no indication in the passage that the manager "supervises" the contractor, even indirectly. (2) Irrelevant to the evidence. The arbitrator is arguing, not that the manager should be "held responsible" for the contractor's delays, but that the manager should have "planned for" the contractor's delays. (3) It is awkward to describe the contractor's "typical delays" as "mistakes."

(E) Incorrect. Be suspicious of the extreme word "only". In sentence 3, the SimSep signal "too" indicates that the manager is **not** the only one to blame.

A principle usually connects the evidence to the conclusion. Both choice C and choice D support the arbitrator's conclusion, but they are incorrect because they are irrelevant to the arbitrator's **evidence**. Compare choice A, which is relevant to *both* the conclusion *and* the evidence. MORAL: Don't forget the evidence on Princple questions.

1.20

An Assumption question for which the Question **includes** the word "if"…	An Assumption question for which the Question does **not** include the word "if"…
…is a Guarantee Assumption question.	…is a Required Assumption question.

Since the Question includes the word "assumed", #20 is an Assumption question. Since the Question includes the word "if", #20 is a Guarantee Assumption question.

✓ **Guarantees that the conclusion is true**
× **Does not guarantee that the conclusion is true**

In sentence 3, the conclusion signal "therefore" indicates that sentence 2 contains evidence and that sentence 3 contains the conclusion. Let's simplify the passage. We'll leave out the issue of "constant dollars" since it turns out that that's not crucial to picking the correct choice. For simplicity, we'll also leave out that the argument focuses Breezeway's Toronto-to-Dallas route.

E1: A year ago, 50% of the tickets were discount, and 50% were full-fare.
E2: Today, 90% of the tickets are discount, and 10% are full-fare.
E3: Compared to last year, the price of full-fare tickets hasn't changed.
C: Compared to last year, the average ticket price has fallen.

Discount tickets are cheaper than full-fare tickets, so E1 and E2 give us a reason to think that the conclusion is true.

Nevertheless, the conclusion could be *false* if: **[a] Compared to last year, the price of full-fare tickets has increased.**

Since E3 rules out possibility [a], E3 gives us another reason to think that the conclusion is true.

However, the argument commits the flaw of one-sidedness. There are **two** types of ticket (discount and full-fare). The conclusion could be false if *either* type of ticket cost more than a year ago, but the author provides evidence for the cost of only **one** of the types (full-fare, E2). The author forgot to provide similar evidence about discount tickets.

The author's conclusion could still be *false* if: [b] **Compared to last year, the price of discount tickets has risen.**

We can rule out possibility [b], and guarantee that the conclusion is *true*, by *assuming* that: [c] **Compared to last year, the price of discount tickets has fallen or stayed the same.**

(B) Correct. Choice B matches [c]. —Well, actually, choice B is more extreme than [c], but for a Guarantee Assumption, extreme is good.

E1: A year ago, 50% of the tickets were discount, and 50% were full-fare.
E2: Today, 90% of the tickets are discount, and 10% are full-fare.
E3: Compared to last year, the price of full-fare tickets hasn't changed.
C: Compared to last year, the average ticket price has fallen.

(A) Incorrect. Wrong subject. The issue is the level of **prices**, not the level of **service**. (Unlike choice A, choice B is about price, not service.)

(C) Incorrect. Choice C is extreme ("all"), which is attractive for a Guarantee Assumption. But the conclusion is about Breezeway's **Toronto-to-Dallas** tickets, not about "all" their tickets. The argument already stated that the price of Tortonto-to-Dallas full-fare tickets hasn't changed (E3); information about Breezeway's full-fare tickets for *other* routes is irrelevant. To fix the argument, we need a choice that deals with discount tickets. (Unlike choice C, choice A is about discount, not full-fare, tickets.)

(D) Incorrect. Wrong subject. The issue is the **price per ticket**, not the **passengers per flight**. (Unlike choice D, choice B is about price, not number of passengers.)

(E) Incorrect. Wrong subject. The issue is the ticket's price, not any other criteria for buying it. (Unlike choice E, choice B is about price, not other criteria for purchase.)

GUESSING: The subject of the conclusion is ticket **prices**. Therefore, you should be attracted to choices B and C, since those are the only choices about price.

Explanation for #20 continued on the next page…

E1: A year ago, 50% of the tickets were discount, and 50% were full-fare.
E2: Today, 90% of the tickets are discount, and 10% are full-fare.
E3: Compared to last year, the price of full-fare tickets hasn't changed.
C: Compared to last year, the average ticket price has fallen.

We have just shown that it is possible to get #20 correct without thinking too much about the exact mathematics of the situation. For completeness, though, here are some numbers that illustrate the math:

	# of discount tickets sold	price of discount ticket	# of full-fare tickets sold	price of a full-fare ticket	average ticket price
Year ago	5	$2	5	$8	$\frac{\$2+\$2+\$2+\$2+\$2+\$8+\$8+\$8+\$8+\$8}{10}=\frac{\$50}{10}$ **=$5**
Today—if author is right	9	$2	1	$8	$\frac{\$2+\$2+\$2+\$2+\$2+\$2+\$2+\$2+\$2+\$8}{10}=\frac{\$26}{10}$ **=$2.60**
Today—if author is wrong	9	$6	1	$8	$\frac{\$6+\$6+\$6+\$6+\$6+\$6+\$6+\$6+\$6+\$8}{10}=\frac{\$62}{10}$ **=$6.20**

A year ago, 50% of the tickets sold were discount (E1), as illustrated in the first row.

Today, 90% of the tickets sold are discount (E2). You can see from the second row why the author thinks that the average ticket price is lower today than a year ago. (Notice that, consistent with E3, the price of a full-fare ticket in the second row ($8) is the same as in the first row.)

Unfortunately, the author has forgotten to consider a possibility like the third row, in which the price of discount tickets has increased from $2 to $6. You can see from the third row that, if the price of discount tickets has increased, then the author's conclusion can be false—the average ticket price might be higher than a year ago, even though more people are buying discount tickets, since the discount tickets have gotten more expensive.

We can guarantee that the outcome looks like the second row, rather than the third row, by assuming choice B—i.e., by assuming that the price of discount tickets hasn't changed. Notice that the second row is consistent with choice B, while the third row is not.

Again, this numerical illustration was included just for completeness. If you identified the flaw of One-Sidedness, it was possible to get #20 correct without thinking through the precise details of the mathematics. MORAL: Learn to recognize the flaw of one-sidedness.

1.21

The phrase "must be true" indicates that #21 is an Inference question.

The Question for #21 is complicated. Don't try to understand it all on your first reading. Instead, put an asterisk ("*") next to the Question. The asterisk will remind you to reread the Question after you have read the passage, at which time the Question should make more sense.

#21 contains opinions from multiple sources, so we should identify whose opinion each sentence refers to. Sentences 1-3 describe the government's position ("the government claims", "the government also contends", "even the government says", "the government admits"). In Sentence 4, the conclusion signal "therefore" indicates that sentence 3 contains some of the editorial's evidence, and that sentence 4 contains the editorial's conclusion.

In summary, the editorial's evidence (sentences 1-3) is based on the government's own claims. The editorial's conclusion is sentence 4.

Now the "*" reminds us to go back and reread the Question.

- The phrase "those statements" refers to "the statements offered in *support* of the editorial's conclusion".
- So "those statements" refers to the editorial's *evidence*, not to the editorial's conclusion.
- So "those statements" refers to sentences 1-3, not to sentence 4.

✓ **Must be true on the basis of sentences 1-3**
× **Could or must be false on the basis of sentences 1-3**

Therefore, for #21, we should **ignore sentence 4** and find a choice that we can infer solely from sentences 1-3.

The government claims (sentence 1): **[a] Nuclear plants are entirely safe.**

The government also claims (sentences 2-3): **[b] We need to limit liability to protect power plants from injury claims "in the case of nuclear accident".**

According to the Question, we don't have to accept that [a] and [b] are both **true**; we just have to accept that both [a] and [b] "correctly describe the government's **position**". In fact, [a] and [b] *can't* both be true, because [a] and [b] are *inconsistent* with each other: If nuclear plants are totally safe ([a]), then making plans for injuries "in case of nuclear accident" ([b]) is **not** needed.

(B) Correct. We have just demonstrated that [a] and [b] are indeed inconsistent. (The contrast signal "but" in sentence 3 is another indication that the government's claims are inconsistent with each other.)

The government claims (sentence 1): **[a] Nuclear plants are entirely safe.**

The government also claims (sentences 2-3): **[b] We need to limit liability to protect power plants from injury claims "in the case of nuclear accident".**

(A) Incorrect. Choice A states that claim [a] is false. Choice A is supported by sentence 4, but not by sentences 1-3. All we can infer from sentences 1-3 is that **either** claim [a] **or** claim [b] is false, but we can't tell which one. (Choice B does say that **either** [a] or [b] is false, so choice B is milder than choice A. For Inference questions, mild choices should be more attractive.)

(C) (D) Incorrect. Both Choice C and choice D basically state that claim [b] is false. However, all we can infer from sentences 1-3 is that **either** [a] or [b] is false—we cannot tell which one. Furthermore, choice D is extreme ("no"), which is suspicious.

(E) Incorrect. (1) You should be suspicious of the extreme word "only". *If claim [b] is true*, that would imply that an accident would pose a threat to the nuclear industry's financial security; however, [b] does not imply that this would be the only threat posed the accident. (2) It is also possible that *claim [a] is true* and that claim [b] is false. In that case, there would be no threats at all posed by nuclear accidents.

1.22

Question type: Principle
✓ **Principle that justifies the editorial's argument**
× **Not a principle that justifies the editorial's argument**

Government's first claim (sentence 1): [a] **There is no danger of nuclear accident**
Government second claim (sentences 2-3): [b] **We need to protect the nuclear industry from liability for injury claims in case of nuclear accident.**
Editorial's conclusion (sentence 4): [c] **The government's first claim is false: there *is* a danger of nuclear accident.**

See the explanation for #21 for more analysis of the passage.

(A) Incorrect. The government claimed that nuclear plants are **safe** ([a]), not **unsafe**.
(B) Incorrect. "Those who have control over" the occurrence of nuclear accidents are, presumably, the nuclear industry itself. However, the government claims, not that the industry stands to **benefit** from accidents, but that the industry stands to **lose** financially from accidents ([b]—without protection, the industry will face bankruptcy).

(C) Incorrect. (1) The "public interest" is irrelevant to the issue. The issue is not "What policy is in the public interest?" Instead, the issue is "Are nuclear plants safe?" (2) The government does claim that nuclear plants are safe ([a]), but the government never gave any reason for **why** nuclear plants are safe. (3) Notice the extreme word "only". The government does claim that the nuclear industry's financial security would be threatened by an accident ([b]), which supports the idea that the industry's financial security depends on plants' being safe. However, the government did *not* say that nuclear plants are safe "**because**" the financial security of the nuclear industry depends on nuclear plants operating safely; much less did the government say that this was the "**only**" reason why plants are safe. As indicated in point 2, the government never gave any reasons at all for why nuclear plants are safe.
So choice C does not justify the editorial's argument. Choice C *would* justify the following argument:
Argument C
E: the threat of bankruptcy from liability for injury claims is the only thing that motivates the nuclear industry to prevent nuclear accidents
C: We should not limit the industry's liability from potential accidents.

(D) See next page.
(E) Incorrect. Choice E says that the **government** is justified, but we're supposed to be justifying the **editorial**.

Government's first claim (sentence 1): [a] **There's no danger of nuclear accident**

Government second claim (sentences 2-3): [b] **We need to protect the nuclear industry from liability for injury claims in case of nuclear accident.**

Editorial's conclusion (sentence 4): [c] **The government's first claim is false: there *is* a danger of nuclear accident.**

(D) Correct. The editorial does indeed consider the government's first claim to be "unsupported", and in fact false, so the *first* clause of choice D does help justify the argument. Let's check the *second* clause.

Choice D, second clause: **Government does not act to prevent a situation <u>unless</u> there is danger that that situation may arise**
***Government does not act to prevent a situation* <u>if not</u> there is danger that that situation may arise** Unless = if not
Translate into arrow notation: **Not danger that situation may arise → *government does not act to prevent situation***
Contrapositive: **[Da] Government acts to prevent situation → there is a danger that the situation may arise**

So the second clause of choice D can be translated into the following principle:

Choice D (second clause):

[Da] Government acts to prevent situation → there is a danger that the situation may arise.

Let's test whether accepting this principle ([Da]) justifies the argument:

[Db] The government is acting to prevent the nuclear industry from going bankrupt from injury claims in case of a nuclear accident.	From [b]. Sentence 2 tells us the government has indeed taken "action".
[Dc] There is a danger of a nuclear accident.	Statement [Db] inputs to [Da]; the output is [Dc].

So, accepting [Da] allows us to infer [Dc]. But [Dc] is the same as [c], the editorial's conclusion. So accepting [Da] allows us to infer ("justify") the editorial's conclusion. So choice D does justify the editorial's conclusion. So choice D is correct.

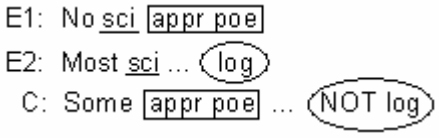
The choices for Principle questions often consist of multiple elements. In order for a choice to be correct, **all** the elements of the choice must be appropriate to the passage. A *common trap* is for an incorrect choice to contain **some** appropriate elements, in addition to some inappropriate elements. The second clause of choice A ("then … be unsafe"), the first clause of choice B ("Fear … well founded"), the middle clause of choice C ("the financial … being safe"), and all but last word of choice E are elements which do match the passage. As we have seen, however, all of these choices contain other elements that do not match the passage. Notice how, in our explanation for choice D, we carefully checked that **both** clauses were appropriate to the passage. MORAL: On Principle questions, make sure that **each** element of the choice is appropriate to the passage. Watch out for "part-right, part-wrong" choices.

1.23

Question Type: Parallel Flaw ("parallel", "flawed")
✓ **Contains a parallel flaw**
× **(1) Not flawed, or (2) Contains an unparallel flaw**

In sentence 2, the evidence signal "since" indicates that the first clause of sentence 2 contains evidence, and that the second clause of sentence 2 contains the conclusion.

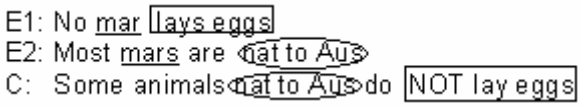
For #23, it is possible to identify which choice is parallel simply by comparing the patterns of the arguments. It is not necessary to actually understand or analyze the logic of the arguments, or to understand why the passage is flawed. As it turns out, it isn't even necessary to translate into arrow notation.



("At least some" means the same thing as "some.") To make it easier to compare this pattern with the patterns in the choices, we have replaced the word "illogical" with the phrase "not logical". Furthermore, we have highlighted key elements of the passage with "underlinings," "boxes," and "circles," which will make it easier to compare the pattern in the passage with the patterns in the choices.

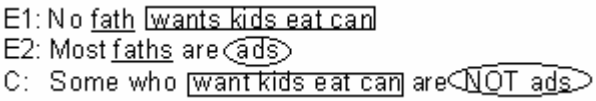
In each of the choices, the evidence signal "since" indicates that the first clause of sentence 2 contains evidence, and that the second clause contains the conclusion.

(A) Incorrect.

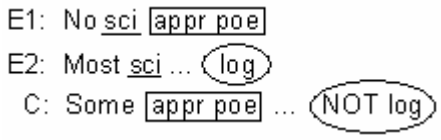


You can see that the pattern of "circles" and "boxes" in choice A's conclusion is not parallel to the pattern in the passage's conclusion. To be parallel, it should be the circle, not the box, which is negated in choice A's conclusion.

(B) Correct.

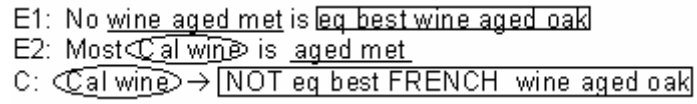


In order to make it easier to compare this pattern with the passage, we have replaced the word "children" with the phrase "not adults". (If we assume that everyone is either a child or an adult, then "not adult"="child".) You can see that the pattern of "underlinings", "boxes", and "circles" in choice B is the same as the pattern in the passage. So choice B is parallel to the passage. So choice B is correct.



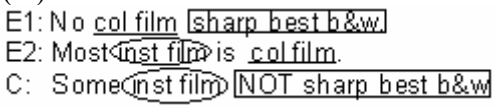
(C) Incorrect. (1) "X is Y" = "If X, then Y." Therefore, the conclusion of choice C is really an If/then. But the conclusion of the passage is a Some. This demonstrates that choice C is incorrect—it is not necessary to look at the pattern of the full argument.

(2) For completeness, here is the pattern of the full argument for choice C:



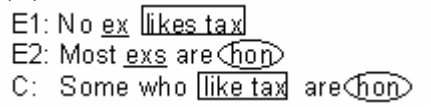
This pattern is not parallel to the passage. Besides the If/then in the conclusion, another problem is that choice C's E2 should be "Most underlines are circles," not "Most circles are underlines."

(D) Incorrect



Choice D is not parallel. To be parallel, Choice D's E2 should be "Most underlines are circles", not "Most circles are underlines". In addition, in choice D's conclusion, it should be the circle, not the box, which is negated.

(E) Incorrect.



Not parallel. In choice E's conclusion, to be parallel the circle should be negated.

To make it easier to compare patterns, you may find it useful to take written notes on the passage and choices. The explanations above illustrate two techniques that are useful for taking written notes on Parallel Flaw questions: (1) Abbreviate, but don't over-abbreviate. Using one-letter symbols (e.g., "No X's are Y") can become confusing, because you keep forgetting what the letters stand for. (2) Use "underlinings", "boxes", and "circles" to make patterns clearer.

Explanation for #23 continued on next page …

We have seen that on #23, it is not necessary to analyze the logic of the arguments in order to determine the correct choice. For completeness, however, we will now offer an analysis of the logic of each argument. Let's start by analyzing the passage.

No sci appr poe	Sentence 1.
***Then not sci* appr poe**	No = then not
E1: Appr poe → *not sci*	Convert into arrow notation
E1': Sci → not appr poe	Contrapositive
C: Some appr poe ... not log	Sentence 2, second clause. "At least some" = "some".
C': Some non-log ... appr poe	Reverse the Some

E1: appr poe → not sci
E1': sci → not appr poe
E2: Most sci ... log
C: Some appr poe ... not log
C': Some non-log ... appr poe

We have translated the Somes and Mosts into ellipsis notation.

Remember that it is invalid to reverse a Most or reverse an If/then, and that it is also invalid to negate terms in a Most or an If/then.

Next, we are going to confirm that the passage is flawed. This step isn't really necessary, since we already know from the Question that the passage is flawed.

Here is a systematic approach for checking whether a conclusion that contains Some, Most, or If/then can be validly inferred from its evidence:

1. Reverse all the Somes in the evidence. Take the contrapositive of all the If/thens in the evidence.
2. Start with a piece of evidence which has the same first term as the conclusion, and which is at least as extreme as the conclusion.
3. Add an If/then whose first term is the same as the second term of the previous piece of evidence.
4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the conclusion.
5. If the conclusion is a Some, you need to try to infer both the conclusion and its reverse. If the choice is an If/then, you do **not** need to try to infer the conclusion's contrapositive.

We have already completed step 1. Let's try to infer C from the evidence:

Start E1: appr poe → not sci *Add* DEADEND *Result* C: Some who appr poe ... not log	DEADEND: None of the If/thens in the evidence has the same first term as E1's second term ("not a scientist").

So we can't infer C from the evidence.

E1: appr poe → not sci
E1′: sci → not appr poe
E2: Most sci … log
C: Some appr poe … not log
C′: Some non-log … appr poe

2. *Start* with a piece of evidence which has the same first term as the conclusion, and which is at least as extreme as the conclusion.

3. *Add* an If/then whose first term is the same as the second term of the previous piece of evidence.

4. Repeat Step 3 until you either reach a DEADEND or *Add* an If/then with the same second term as the conclusion.

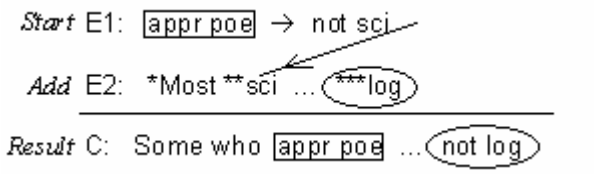
5. If the conclusion is a Some, you need to try to infer both the conclusion and its reverse. If the choice is an If/then, you do **not** need to try to infer the conclusion's contrapositive

Try to infer C′ from the evidence.

Start DEADEND *Result* C': Some non-log … appr poe	DEADEND: None of the first terms in the evidence is the same as the first term of C′ ("illogical people").

So we can't validly infer C or C′ from the evidence. So we can't validly infer the conclusion from the evidence. So the passage really is flawed.

Next, we have to find some **flawed** reasoning that could make it **seem** like we could deduce the conclusion from the evidence:



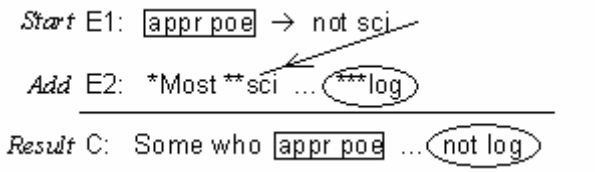
There are **three** flaws in this deduction:

* You can't Add a Most. (Remember: You can only Add If/thens.)

** The first term of the Add ("scientists") does not match the second term of the Start ("not a scientist").

*** The second term of the Add ("are logical") does not match the second term of the Result ("are illogical").

Now we have to find a choice that is (1) flawed and that (2) commits the same three flaws as the passage.



1. Reverse all the Somes in the evidence. Take the contrapositive of all the If/thens in the evidence.

2. Start with a piece of evidence which has the same first term as the conclusion, and which is at least as extreme as the conclusion.

3. Add an **If/then** whose first term is the same as the second term of the previous piece of evidence.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the conclusion.

5. If the conclusion is a Some, you need to try to infer both the conclusion and its reverse. If the choice is an If/then, you do **not** need to try to infer the conclusion's contrapositive.

(A) Incorrect.

No mar lays eggs.	Choice A, sentence 1
***Then not mar* lays eggs**	No = then not
E1: Lays eggs → *not mars*	
E1': Mars → not lay eggs	Contrapositive

E1: lays eggs → not mars
E1': mars → not lay eggs
E2: Most mars ... nat Aus
C: Some nat Aus ... not lay eggs.
C' (reverse): Some non-egg-layers ... nat Aus

Let's check whether choice A is flawed. Try to infer C from the evidence:

Start DEADEND Result C: Some nat Aus ... not lay eggs.	DEADEND: There is no piece of evidence with the same first term as C ("native to Australia").

So we can't infer C. Now try to infer C′.

Start DEADEND Result C': Some non-egg-layers ... nat Aus	DEADEND: None of the first terms in the evidence is the same as the first term of C′ ("non-egg-layers").

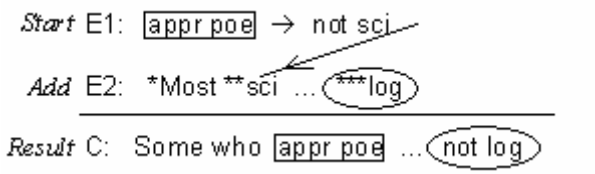
So we can't infer C or C′ from the evidence. So, choice A is flawed.

Next, let's try to find the same flaws in choice A as we found in the passage.

We can't do it! For example, here is some **mistaken** reasoning which could make it **seem** like choice A was valid:

[Aa] *Most nat Aus ... mars	*This step is **flawed**. You cannot reverse a Most, so you cannot infer [Aa] from E2.
Start [Aa] Most nat Aus ... mars Add E1': mars → not lay eggs Result C: Some nat Aus ... not lay eggs	This step would be valid **if** [Aa] were a valid deduction in the first place. Since [Aa] was **not** valid, neither is the rest of the argument.

Flaw * does not match the passage pattern. Nor is there any other way to make choice A match the pattern of flaws we found in the passage. So choice A is incorrect.



1. Reverse all the Somes in the evidence. Take the contrapositive of all the If/thens in the evidence.

2. Start with a piece of evidence which has the same first term as the conclusion, and which is at least as extreme as the conclusion.

3. Add an **If/then** whose first term is the same as the second term of the previous piece of evidence.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the conclusion.

5. If the conclusion is a Some, you need to try to infer both the conclusion and its reverse. If the choice is an If/then, you do **not** need to try to infer the conclusion's contrapositive.

(B) Correct.

No fath wants child eat can bed	Choice B, sentence 1
***Then not fath* wants child eat can bed**	No = then not
E1: Wants child eat can bed → *not fath*	
E1': Fath → not want child eat can bed	Contrapositive

E1: Want child eat can bed → not fath
E1': fath → not want child eat can bed
E2: Most fath ... ad
C: Some want child eat can bed ... child
C' (reverse): Some child ... want child eat can bed

Check whether choice B is flawed. Try to infer C from the evidence:

Start E1: Wants child eat can bed → not fath Add DEADEND Result C: Some who want child eat can bed ... child	DEADEND: There is no If/then with a first term that is the same as E1's second term ("not a father").

So we can't infer C. Try to infer C' from the evidence:

Start DEADEND Result C': Some child ... want child eat can bed	DEADEND: There is no piece of evidence whose first term is the same as C''s first term ("children").

So we can't infer C or C' from the evidence. So choice B is flawed.

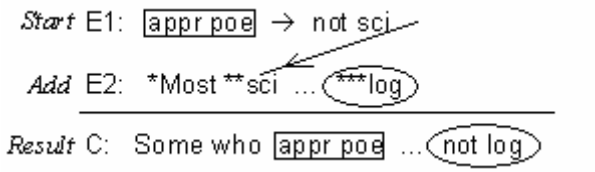
Start E1: Wants child eat can bed → not fath Add E2: *Most **fath ... ***ad Result C: Some who want child eat can bed ... child	Here is some **mistaken** reasoning which could make it **seem** as if choice B is valid.

* Adding a Most. Same as Flaw * in the passage.

** Second term of Start ("not a father") doesn't match first term of Add ("fathers"). Same as Flaw ** in the passage.

*** Second term of Add ("are adults") doesn't match second term of Result ("are children" = "are not adults"). Same as Flaw *** in the passage.

Since choice B's pattern of flaws is parallel to the passage, choice B is correct.



1. Reverse all the Somes in the evidence. Take the contrapositive of all the If/thens in the evidence.

2. Start with a piece of evidence which has the same first term as the conclusion, and which is at least as extreme as the conclusion.

3. Add an **If/then** whose first term is the same as the second term of the previous piece of evidence.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the conclusion.

5. If the conclusion is a Some, you need to try to infer both the conclusion and its reverse. If the choice is an If/then, you do **not** need to try to infer the conclusion's contrapositive.

(C) Incorrect. Unlike the passage, Choice C's conclusion is an If/then, so choice C is not parallel. For completeness, though, here is a further analysis of choice C:

No wine aged met cont is equal to best wine aged oak.	Choice C, sentence 1
Then not wine aged met cont **is equal to best wine aged oak**	No = then not
E1: equal best wine aged oak → *not aged met cont*	
E1′: aged met cont → inferior to best wine aged oak	Contrapositive
C: Cal wine → inferior to best French wine aged oak	Sentence 2, second clause. "X is Y" = "X → Y"

E1: equal to best wine aged oak → not aged met cont
E1': aged met cont → inferior to best wine aged oak
E2: Most Cal wine ... aged met cont
C: Cal wine → inferior to best French wine aged oak

Check whether choice C is flawed. Try to infer the conclusion from the evidence:

Start DEADEND Result C: Cal wine → inferior to best French wine aged oak	DEADEND: We can't Start with E2, since you can't infer an If/then (extreme) from a Most (mild).

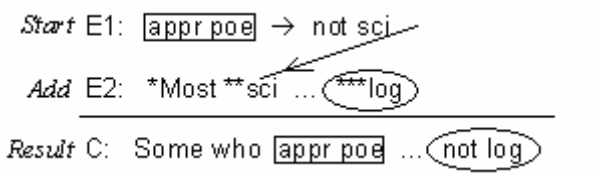
So we can't infer the conclusion from the evidence. So choice C is flawed.

Try to find the same pattern of flaws in choice C as we found in the passage.

You can't do it! For example, here is some **mistaken** reasoning which could make it **seem** like choice C was valid:

Start E2: *Most Cal wine ... aged met cont Add E1': aged met cont → inf best wine aged oak Result [Ca] Cal wine → inf best wine aged oak	*This step is flawed. You cannot infer extreme conclusions from mild evidence; so the Result cannot be more extreme than the Start, so you cannot infer an extreme If/then like [Ca] from mild evidence like E2.
C: [Cb] Cal wine → inferior to best French wine aged oak From [Ca]. Mild outputs make mild If/thens, and you can infer a mild conclusion from extreme evidence, so this step would be valid if the previous step were valid.	

This pattern of flawed reasoning is different from the pattern we found in the passage. Nor is there any other way to make choice C match the pattern of flaws in the passage. So choice C's pattern of flaws is different than the passage's, and choice C is incorrect.



1. Reverse all the Somes in the evidence. Take the contrapositive of all the If/thens in the evidence.

2. Start with a piece of evidence which has the same first term as the conclusion, and which is at least as extreme as the conclusion.

3. Add an **If/then** whose first term is the same as the second term of the previous piece of evidence.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the conclusion.

5. If the conclusion is a Some, you need to try to infer both the conclusion and its reverse. If the choice is an If/then, you do **not** need to try to infer the conclusion's contrapositive.

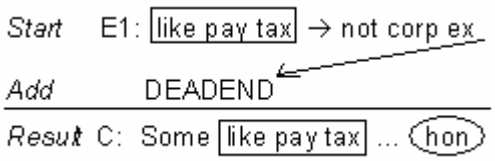
(D) Explanation for choice D is on the next page.

(E) Incorrect.

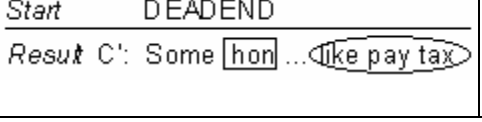
No corp ex likes pay taxes.	Choice E, sentence 1
***Then not corp ex* like pay taxes**	No = then not
E1: like pay taxes → *not corp ex*	Convert into arrow notation.
E1': corp ex → not like pay taxes	Contrapositive

E1: like pay tax → not corp ex
E1': corp ex → not like pay tax
E2: Most corp ex ... hon
C: Some like pay tax ... hon
C' (reverse): Some hon ... like pay tax

Check whether choice E is flawed. Try to infer C from the evidence:

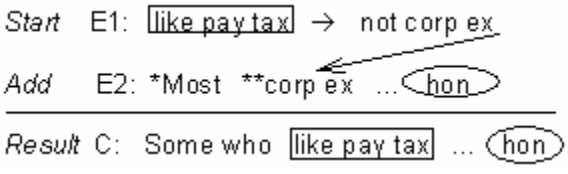
	DEADEND: There is no If/then whose first term is the same as E1's second term ("not a corporate executive").

So we can't infer C. Try to infer C′:

	DEADEND: None of the first terms in the evidence is the same as the first term of C′ ("honest people").

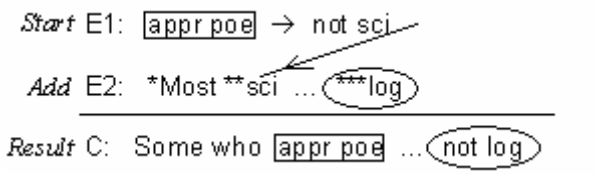
So we can't infer C or C′ from the evidence. So choice E is flawed.

You can't find the same set of flaws in choice E as in the passage. For example, here's some **mistaken** reasoning which could make it **seem** like choice E was valid:

	This reasoning commits two flaws: *Adding a Most. ** The Add's first term ("corp ex") doesn't match the Start's second term ("not corp ex").

We found these same two flaws in the passage. But the passage also committed a *third* flaw ("***") which choice E *doesn't* commit. So choice E is incorrect.

Explanation for #23 continued on next page …



1. Reverse all the Somes in the evidence. Take the contrapositive of all the If/thens in the evidence.

2. Start with a piece of evidence which has the same first term as the conclusion, and which is at least as extreme as the conclusion.

3. Add an **If/then** whose first term is the same as the second term of the previous piece of evidence.

4. Repeat Step 3 until you either reach a DEADEND or Add an If/then with the same second term as the conclusion.

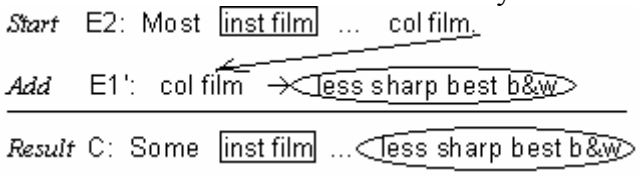
5. If the conclusion is a Some, you need to try to infer both the conclusion and its reverse. If the choice is an If/then, you do **not** need to try to infer the conclusion's contrapositive.

(D) Incorrect.

No col film sharp best b&w.	Choice D, sentence 1.
***Then not col film* sharp best b&w**	No = then not
E1: sharp best b&w → *not col film*	
E1': col film → less sharp best b&w	Contrapositive

E1: sharp best b&w → not col film
E1′: col film → less sharp best b&w
E2: Most inst film ... col film.
C: Some inst film ... less sharp best b&w
C' (reverse): Some less sharp best b&w ... inst film

Check whether choice D is flawed. Try to infer C from the evidence:



It is valid to infer a mild conclusion from extreme evidence, so the Result can be milder than the Start, so we can infer C (Some, mild) from E2 and E1 (Most & If/then, extreme). So we **can** infer the conclusion from the evidence. So choice D is not flawed. So choice D is incorrect.

(E) Explanation on previous page.

MORALS: (1) Parallel Flaw questions are usually designed so that there are both fast and slow ways to eliminate most of the choices. On #23, the fast way to eliminate all the wrong choices was simply to compare the *patterns* of the arguments; the slow way was to actually analyze the *logic* of the arguments. On Parallel Flaw, try to find the fast ways and avoid the slow ways! (2) You can Start with a Most, but you can't Add a Most. Remember: You can only Add If/thens. (3) You cannot negate any of the terms in a Most.

1.24

Question type: One-Of-A-Kind—the Question does not fall into any particular type. Put an asterisk ("*") next to the Question to remind yourself to reread it after you have read the passage. Then, read the passage. Then, reread the Question—the Question should make more sense after you have read the passage.

Sentence 2: The current enforcement system controls idling pollutant levels.

✓ A **reason the current system might be ineffective at controlling overall pollutant levels**

× A **reason the current system might be effective at lowering overall pollution levels, or irrelevant**

The passage says that the current system controls "idling" pollution. The Question, however, changes the subject to "overall" pollution. The correct choice should *connect* these two different subjects to show how controlling "idling" pollution can have no effect, or an adverse effect, on "overall" pollution.

× **Low idling pollution → low overall pollution**

✓ **Low idling pollution → high overall pollution**

(C) Correct. **Low idling pollution → High overall pollution**

#24 does not contain any arguments, so, strictly speaking, #24 cannot contain any flaws. Nevertheless, notice that the passage and Question for #24 are similar to an argument that commits the flaw of changing the subject.

MORAL: Be willing to reread passages and Questions. On your first readings, you might not have noticed that the passage and Question were about different subjects.

(A) Incorrect. (1) The Question tells us to evaluate current **enforcement** of emission standards, not emission-control **technology**. (2) There is no indication in the passage that current control technologies are reaching their limits. (3) The issue is **effectiveness**, not **expense**.

(B) Incorrect. There is no indication in the passage that the devices are **not** frequently recalibrated, or that it is difficult to recalibrate them.

(D) Incorrect. Opposite. If car owners are trying to comply with emission standards, that would tend to help, rather than hinder, the goal of controlling pollutants.

(E) Incorrect. (1) The Question tells us to evaluate current **enforcement**, not **standards**. (2) The passage gives no info about older cars, so we can't evaluate how choice E would affect effectiveness. (3) If you use outside knowledge (which you shouldn't!), you'd know that in real-life, it's expensive to reduce older cars' emissions, so allowances are sometimes made which allow older cars to pollute more than newer cars. So, when allowances **are** made for older cars, that tends to allow *increased* pollution, making enforcement less effective. If **no** allowances are made for older cars, then, that would tend to *decrease* pollution, making enforcement more effective. So if you use outside knowledge (which you shouldn't!) choice E becomes an Opposite.

1.25

Question type: The word "EXCEPT" tells us that #25 is an Except Question. The phrase "explanation of differences" tells us that #25 is a Paradox Except question.

To classify the choices for an Except question, we use the Except Method. The Except Method has two steps: (1) Cover up the word "EXCEPT"; whatever's left in the Question will classify **incorrectness**. Write down this classification. (2) To classify correctness, negate your classification for incorrectness. *Write down* this classification too.

Each of the following, if true, would contribute to an explanation of differences described above EXCEPT:	Let's apply the Except Method to the Question for #25.
Each of the following, if true, would contribute to an explanation of differences described above ~~EXCEPT~~:	1. Cover up the word "EXCEPT".
Each of the following, if true, *would contribute to an explanation of differences described above* ~~EXCEPT~~:	"Whatever's left" in the Question will classify **incorrectness**.
× **helps explain the differences**	*Write down* this classification.
√ **Does <u>not</u> help explain the differences**	2. To classify correctness, negate your classification for incorrectness.
√ **Makes the differences more puzzling, or is irrelevant**	Our classification of correctness is negative ("does not help"). When convenient, rephrase negatives as positives by listing the possibilities. If the correct choice does **not** explain the differences, then what **does** it do? There are only two possibilities—namely, "making the differences more puzzling" or "being irrelevant"—so in this case there *is* a convenient way to rephrase our classification of correctness.

Irrelevant choices are usually incorrect, but on Except questions they are **correct**. A *common mistake* on Except questions is to think that irrelevant choices are **incorrect**.

Remember that, for Except questions, you should always *write down* your classification of the choices. Here is what we would write for #25:

× **Helps explain the differences**

√ **Makes the differences more puzzling; or, irrelevant**

In Sentence 3, the contrast signal "unlike" indicates that sentence 3 presents the differences that we have to explain. Update your classifications:

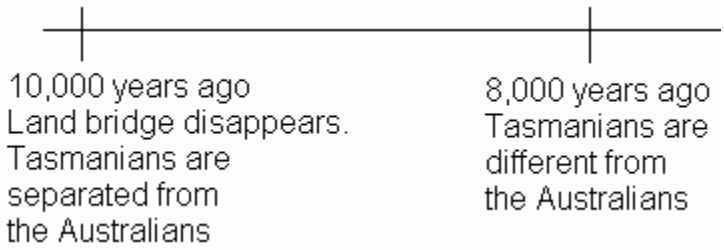
× **Helps explain the differences between Tasmanians and Australians**

√ **Makes the differences between Tasmanians and Australians more puzzling; or, irrelevant**

× **Helps explain the differences between Tasmanians and Australians**

✓ **Makes the differences between Tasmanians and Australians more puzzling; or, irrelevant**

You might find to helpful to draw a timeline.



(A) Incorrect. The Tasmanians abandoned practices they shared with the Australians: this **explains** why the Tasmanians are **different** from Australians.

(B) Correct. Choice B says that Tasmanians had spear-throwers etc. in the *past*. If so, this makes it **more puzzling** that, unlike the Australians (sentence 3), the Tasmanians do not have spear-throwers etc. *anymore* (sentence 3).

(C) Incorrect. Australia and Tasmania were separated 10,000 years ago (sentence 1). If Australia did not get fishing nets etc. until *after* the separation (choice C), then it would be difficult for the Australians to pass the fishing net technology on to the Tasmanians. This **explains** why the Tasmanians do not have fishing nets (sentence 3).

(D) Incorrect. If Australians did not get boomerangs etc. until after the separation from Tasmania (choice D), then it would be difficult for the Australians to pass this technology on to the Tasmanians. This **explains** why the Tasmanians do not have boomerangs (sentence 3).

(E) Incorrect. If the northern Australians with advanced technology had "no contact" with the Tasmanians, then that **explains** why the northern Australians didn't pass their technologies on to the Tasmanians. This is a reason for the Australians and Tasmanians to be **different.**

#20-23 are difficult, but #24-25 are less difficult. So this section rewarded people who took quick guesses on the hard problems and who therefore had the time to solve the less difficult problems. The section punished people who got bogged down in the hard problems and who therefore had to guess on the less difficult problems.

Section 2 (Reading Comprehension)

…coming soon