

***Concise Guide to Critical Thinking 1st edition
Vaughn Test Bank***

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Instructor's Manual
and Test Bank
to Accompany

Concise Guide to Critical Thinking

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Chapter 1

Critical Thinking, Facts, and Feelings

Chapter 1 Summary

- Critical thinking is the systematic evaluation or formulation of beliefs, or statements, by rational standards. Critical thinking is *systematic* because it involves distinct procedures and methods. It entails *evaluation* and *formulation* because it's used to both assess existing beliefs (yours or someone else's) and devise new ones. And it operates according to *reasonable standards* in that beliefs are judged according to the reasons and reasoning that support them.

Why It Matters

- Critical thinking matters because our lives are defined by our actions and choices, and our actions and choices are guided by our thinking. Critical thinking helps guide us toward beliefs that are worthy of acceptance, that can us help be successful in life, however we define success.
- A consequence of not thinking critically is a loss of personal freedom. If you passively accept beliefs that have been handed to you by your family and your culture, then those beliefs are not really yours. If they are not really yours, and you let them guide your choices and actions, then they—not you—are in charge of your life. Your beliefs are yours only if you critically examine them for yourself to see if they are supported by good reasons.
- The empowerment obtained through critical thinking can take several forms: Skills for learning and exploring; defense against error, manipulation, and prejudice; and tools for self-discovery.
- Critical thinking does not necessarily lead to cynicism. It can complement our feelings by helping us sort them out. And it doesn't limit creativity—it helps perfect it.
- Critical thinking is about determining what we are justified in believing, and that involves an openness to other points of view, a tolerance for opposing perspectives, a focus on the issue at hand, and fair assessments of arguments and evidence. To paraphrase a bumper-sticker slogan: Good critical thinking does not make cynics—people make cynics.
- In a very important sense, critical thinking is thinking outside the box. When we passively absorb the ideas we encounter, when we refuse to consider any alternative

explanations or theories, when we conform our ideas to the wishes of the group, when we let our thinking be controlled by bias and stereotypes and superstition and wishful thinking—we are deep, deep in the box. But we rise above all that when we have the courage to think critically. When we are willing to let our beliefs be tried in the court of critical reason, we open ourselves to new possibilities, the dormant seeds of creativity.

Claims and Reasons

- Critical thinking is a rational, systematic process that we apply to beliefs of all kinds. *Belief* is another word for statement, or claim. A *statement* is an assertion that something is or is not the case. When you're engaged in critical thinking, you are mostly either evaluating a statement or trying to formulate one. In both cases your primary task is to figure out how strongly to believe the statement (based on how likely it is to be true). The strength of your belief will depend on the strength of the reasons in favor of the statement.
- Sometimes you may not be able to assign any substantial weight at all to the reasons for or against a statement. There simply may not be enough evidence to rationally decide. Generally when that happens, good critical thinkers don't arbitrarily choose to accept or reject a statement. They suspend judgment until there is enough evidence to make an intelligent decision.

Reasons and Arguments

- Reasons provide support for a statement. That is, they provide us with grounds for believing that a statement is true. Reasons are themselves expressed as statements. So a statement expressing a reason or reasons is used to show that another statement is true or likely to be true. This combination of statements—a statement (or statements) supposedly providing reasons for accepting another statement—is known as an *argument*. Arguments are the main focus of critical thinking. They are the most important tool we have for evaluating the truth of statements (our own and those of others) and for formulating statements that are worthy of acceptance. Arguments are therefore essential for the advancement of knowledge in all fields..
- Often people use the word *argument* to indicate a quarrel or heated exchange. In critical thinking, however, *argument* refers to the assertion of reasons in support of a statement. The statements (reasons) given in support of another statement are called the *premises*. The statement that the premises are intended to support is called the *conclusion*.
- Being able to identify arguments is an important skill on which many other critical thinking skills are based. The task is made easier by indicator words that frequently accompany arguments and signal that a premise or conclusion is present. Premise

indicators include *for*, *since*, and *because*. Conclusion indicators include *so*, *therefore*, and *thus*.

- Persuading someone to agree with you is not the same thing as presenting them with a good argument. You can influence people's opinions by using words to appeal to their ego, gullibility, bigotry, greed, anger, prejudice, and more. You just have to use emotional language, psychological ploys, semantic or syntactic tricks, and outright lies. But having done so, you would not have demonstrated that *any* belief is true or warranted. You would not have shown that a claim is *worthy of acceptance*. This latter task is a matter of logic and argument. The machinations of raw persuasion are not.

Arguments in the Rough

- Arguments almost never appear neatly labeled for identification. They usually come imbedded in a lot of statements that are not part of the arguments. Arguments can be complex and lengthy. Your main challenge is to identify the conclusion and premises without getting lost in all the other verbiage.
- Of all these nonargumentative elements, explanations are probably most easily confused with arguments. Arguments try to prove or demonstrate that a statement is true. They try to show that something is the case. Explanations, however, do not try to prove that a statement is true. They try to show why or how something is the way it is.

ANSWERS TO EXERCISES

Exercise 1.1

1. Critical thinking is the systematic evaluation or formulation of beliefs, or claims, by rational standards.
2. Critical thinking is primarily concerned with *how* you think.
3. Critical thinking is systematic because it involves distinct procedures and methods.
4. Critical thinking operates according to rational standards in that beliefs are judged by how well they are supported by reasons.
5. If you passively accept beliefs that have been handed to you by your parents, your culture, or your teachers, then those beliefs are not really yours. If they are not really yours, and you let them guide your choices and actions, then they—not you—are in charge of your life.
6. The *critical* in critical thinking refers to the exercising of careful judgment and judicious evaluation.
7. Critical thinking is the systematic evaluation of beliefs using critical reasoning, assessment of evidence, argumentation, and skills in avoiding psychological errors. Logic is the much narrower study of the truth or validity of statements.
8. A statement is a claim that asserts that something is or is not the case.
9. Explanations are statements that tell us why or how something is the case.
10. We should proportion our acceptance of a statement according to the reasons in its favor.

11. An argument is a claim (or claims) supposedly providing reasons for accepting another claim.
12. If the accident happened at 5:00 p.m., it was John's fault. The accident did happen at 5:00 p.m., so it was John's fault.
13. The function of a premise is to lend support to a conclusion.
14. In an argument, a conclusion is a claim that premises are intended to support.
15. An argument requires reasons that support a conclusion; the mere assertion of a belief does not provide reasons.
16. False.
17. No.
18. Yes.
19. Indicator words are words that frequently accompany arguments and signal that a premise or conclusion is present.
20. Therefore, consequently, so.
21. Because, since, for.
22. The poll suggests that most people are happy. Therefore, most of them are happy.
23. Look for the conclusion first.
24. False.

Exercise 1.2

1. No statement
2. No statement
3. Statement
4. No statement
5. No statement
6. No statement
7. Statement
8. Statement
9. Statement
10. No statement

Exercise 1.3

1. Argument. *Conclusion:* He should avoid her.
2. No argument
3. No argument
4. No argument
5. No argument
6. No argument
7. No argument
8. Argument. *Conclusion:* Jesus loves me.
9. Argument. *Conclusion:* Spiderman is a better superhero than Superman.
10. Argument. *Conclusion:* Whether our argument concerns public affairs or some other subject we must know some, if not all, of the facts about the subject on which we are to speak and argue.
11. Argument. *Conclusion:* Don't outlaw guns.

12. Argument. *Conclusion*: If someone says something that offends me, I should have the right to stop that kind of speech.
13. Argument. *Conclusion*: Citizens who so value their “independence” that they will not enroll in a political party are really forfeiting independence.
14. Argument. *Conclusion*: If someone says something that offends me, I cannot and should not try to stop them from speaking.
15. Argument. *Conclusion*: Car alarms should be banned.
16. Argument. *Conclusion*: The U.S. government cannot be trusted when it comes to sending our children to war.

Exercise 1.4

1. Argument. *Conclusion*: Faster-than-light travel is not possible.
Premise: Faster-than-light travel would violate a law of nature.
2. Argument. *Conclusion*: Therefore, you are not fit to serve in your current capacity. *Premise*: You have neglected your duty on several occasions. *Premise*: You have been absent from work too many times.
3. No argument.
4. Argument. *Conclusion*: The flu epidemic on the East Coast is real.
Premise: Government health officials say so.
Premise: I personally have read at least a dozen news stories that characterize the situation as a “flu epidemic.”
5. Argument. *Conclusion*: They are nothing more than fanatic murderers.
Premise: The terrorist group ISIS in Syria and Iraq has killed thousands of innocent citizens.
6. Argument. *Conclusion*: Current-day Christians use violence to spread their right-to-life message. *Premise*: These Christians, often referred to as the religious right, are well known for violent demonstrations against Planned Parenthood and other abortion clinics. *Premise*: Doctors and other personnel are threatened with death. *Premise*: Clinics have been bombed. *Premise*: There have even been cases of doctors being murdered.
7. No argument.
8. No argument.
9. Argument. *Conclusion*: Witches are real. *Premise*: They are mentioned in the Bible. *Premise*: There are many people today who claim to be witches. *Premise*: Historical records reveal that there were witches in Salem.
10. No argument.
11. Argument. *Conclusion*: Therefore, Vaughn’s car is ready for the junkyard. *Premise*: Vaughn’s car is old. *Premise*: It is beat up. *Premise*: It is unsafe to drive.

Exercise 1.5

1. *Premise*: Strong family values have been shown to decrease crime rates. *Premise*: Poverty, political conflict, and deficit spending are all caused by a lack of family values.
2. *Premise*: Any creature that can suffer pain has moral rights. *Premise*: All animals can suffer pain.

3. *Premise:* Freedom of choice in all things is a basic moral right. *Premise:* Abortion is no different than scraping off a few cells from one's skin, and a woman certainly has the right to do that.
4. *Premise:* Later I realized that I had completely lost track of time. *Premise:* I felt as if I was frozen forever.
5. *Premise:* The world's climatologists have predicted that the earth will soon be destroyed by extreme heat and earthquakes. *Premise:* The world's climatologists are never wrong.
6. *Premise:* Vaughn has admitted that he knows nothing about animals. *Premise:* The Society for the Prevention of Cruelty to Animals has declared Vaughn a dummy when it comes to animals.
7. *Premise:* The media are reporting that there are suspicions regarding the financial dealings of Governor Spendthrift. *Premise:* Many people in state government say that they are suspicious of the governor's financial dealings.
8. *Premise:* The FBI and CIA say that the Internet is a terrorist's most dangerous weapon. *Premise:* Terrorists say that their most dangerous weapon is the Internet.
9. *Premise:* The Internet has led to the capture of more terrorists than anything else. *Premise:* The U.S. Attorney General has asserted that the Internet is the best friend that anti-terrorist teams have.
10. *Premise:* Scientific studies have shown that pornography educates people about sexuality. *Premise:* Societies that use pornography are the most highly educated about sexuality.
11. *Premise:* Scientific studies have shown that pornography always misleads people about sexuality. *Premise:* The more pornography a person uses, the more ignorant he or she is about sexuality.
12. *Premise:* All the top TV critics agree that *The Sopranos* is the greatest series in TV history. *Premise:* I have compared *The Sopranos* to all other TV series and found that the show outshines them all.
13. *Premise:* It is the duty of every student to prevent any arbitrary decisions by the administration. *Premise:* This tuition increase is an arbitrary decision by the administration.
14. *Premise:* After having two drinks, Ling passes out. *Premise:* Ling is completely drunk after one drink.

Exercise 1.6

1. Argument. *Conclusion:* The Religious Right is not pro-family.
Premise: Concerned parents realize that children are curious about how their bodies work and need accurate, age-appropriate information about the human reproductive system.
Premise: Thanks to Religious Right pressure, many public schools have replaced sex education with fear-based "abstinence only" programs that insult young people's intelligence and give them virtually no useful information.
2. *Conclusion:* [Francis Bacon] is the father of experimental philosophy. *Premise:* Before Chancellor Bacon, no one had any idea of experimental philosophy. *Premise:* Of an infinity of experiments which have been made since his time, there is hardly a single one that has not been pointed out in his book.
3. Argument. *Conclusion:* There is no archaeological evidence for the [Biblical] Flood.
Premise: If a universal Flood occurred between five and six thousand years ago, killing all humans except the eight on board the Ark, it would be abundantly clear in the archaeological

record. *Premise*: The destruction of all but eight of the world's people left no mark on the archaeology of human cultural evolution.

4. *Conclusion*: Moral subjectivism has some rather bizarre consequences. *Premise*: For one thing, it implies that each of us is morally infallible. (As long as we approve of or believe in what we are doing, we can do no wrong.) *Premise*: But we cannot be morally infallible.

TEST BANK

Multiple Choice

(Correct answers are marked with an asterisk.)

1. A fundamental concern of critical thinking is...
 - a. The quality of your character
 - *b. The quality of your beliefs
 - c. The cause of your beliefs
 - d. What you think, not how you think
2. The systematic evaluation or formulation of beliefs by rational standards is known as...
 - a. Explanatory hypotheses
 - b. Traditional beliefs
 - c. Creative thinking
 - *d. Critical thinking
3. The word *critical* in "critical thinking" refers to...
 - *a. Using careful judgment or judicious evaluation
 - b. A fault-finding attitude
 - c. Attempts to win an argument
 - d. A lack of respect for other people
4. An assertion that something is or is not the case is known as a(n)...
 - a. Predicate
 - b. Premise
 - c. Argument
 - *d. Statement
5. Statements backed by good reasons are...
 - a. To be believed with certainty
 - *b. Worthy of strong acceptance
 - c. Beyond doubt
 - d. Deserving of weak acceptance
6. A group of statements in which some of them (the premises) are intended to support another of them (the conclusion) is known as a(n)...
 - a. Chain argument
 - b. Claim
 - *c. Argument
 - d. Reason

7. Words that frequently accompany arguments and signal that a premise or conclusion is present are known as...
- *a. Indicator words
 - b. Premises
 - c. Indicator verbs
 - d. Argument components
8. Probably the best advice for anyone trying to uncover or dissect arguments is...
- a. Find the premises first
 - b. Paraphrase the argument
 - c. Determine the truth of premises
 - *d. Find the conclusion first
9. When you show why or how something is the way it is, you are...
- a. Stating an argument
 - *b. Offering an explanation
 - c. Showing that a statement cannot be proved
 - d. Showing that a statement is in dispute
10. According to the text, if you passively accept beliefs that have been handed to you by your culture, then those beliefs are...
- a. Worthy of acceptance
 - *b. Not really yours
 - c. Critically examined
 - d. Worthy of rejection
11. Critical thinking concerns...
- a. Determining the cause of our beliefs
 - b. Pinpointing the psychological basis of our beliefs
 - *c. Determining the quality of our beliefs
 - d. Assessing the practical impact of our beliefs
12. An assertion that something is or is not the case is...
- a. An exclamation
 - *b. A statement
 - c. A premise
 - d. An equivocation
13. The statements (reasons) given in support of another statement are called...
- a. An argument
 - b. The conclusion
 - *c. The premises
 - d. The complement
14. In most extended argumentative passages...

- a. Premises and conclusions make up a large portion of the total wordage
 - *b. Premises and conclusions make up only a small portion of the total wordage
 - c. Premises and conclusions are usually clearly labeled
 - d. Premises and conclusions are equal in number
15. A central goal of higher education is to enable students to...
- a. Justify preconceived notions
 - b. Avoid questioning cultural beliefs
 - c. Discard strongly held ideas
 - *d. Think critically and carefully for themselves
16. Critical thinking is the enemy of...
- *a. Unwarranted assumptions
 - b. Subjective beliefs
 - c. Persuasion
 - d. Creative thinking
17. When statements are backed by good reasons, they are...
- a. Acceptable to everyone
 - b. Clear
 - c. Beyond criticism
 - *d. Worthy of belief
18. These two statements—"The *Wall Street Journal* says that people should invest heavily in stocks. Therefore, investing in stocks is a smart move."—constitute...
- a. No argument
 - b. An explanation
 - *c. An argument
 - d. Two conclusions
19. An explanation tells us...
- *a. Why or how something is the case
 - b. That something is the case
 - c. That a claim should be accepted
 - d. Why an argument should be believed
20. This sentence—"Don't believe anything the president says"—is...
- a. A statement
 - *b. Not a statement
 - c. An argument
 - d. An explanation

Short Answer/Short Essay

1. Why is it important to critically examine your beliefs?
2. What is the role of reasons in critical thinking?
3. How does an explanation differ from an argument?
4. What is probably the best advice for anyone trying to evaluate an argument? What is the rationale behind this advice?
5. Why does critical thinking matter?

Web Links

<https://www.macat.com/blog/examples-of-critical-thinking/> “10 Examples of Critical Thinking that Changed the World”

<http://www.rasmussen.edu/student-life/blogs/main/critical-thinking-skills-you-need-to-master-now/> “6 Critical Thinking Skills You Need to Master Now,” from Rasmussen College

<https://www.psychologytoday.com/blog/in-one-lifespan/201210/critical-thinking-and-real-world-outcomes> “Critical Thinking and Real-World Outcomes,” from *Psychology Today*

http://www.huffingtonpost.com/terry-newell/truth-and-the-hard-work-of-thinking/b_14630922.html “Truth and the Hard Work of Thinking,” in a *Huffington Post* blog

<http://www.criticalthinking.org/pages/a-brief-history-of-the-idea-of-critical-thinking/408> “A Brief History of the Idea of Critical Thinking,” Center for Critical Thinking (article taken from California Teacher Preparation for Instruction in Critical Thinking: Research Findings and Policy Recommendations: State of California, California Commission on Teacher Credentialing, Sacramento, CA, March 1997. Principal authors: Richard Paul, Linda Elder, and Ted Bartell)

Key Terms

argument A group of statements in which some of them (the premises) are intended to support another of them (the conclusion).

conclusion In an argument, the statement that the premises are intended to support.

critical thinking The systematic evaluation or formulation of beliefs or statements by rational standards.

explanation A statement or statements intended to tell why or how something is the case.

indicator words Words that frequently accompany arguments and signal that a premise or conclusion is present.

inference The process of reasoning from a premise or premises to a conclusion based on those premises.

logic The study of good reasoning, or inference, and the rules that govern it.

premise In an argument, a statement or reason given in support of the conclusion.

statement An assertion that something is or is not the case.