

CAAP STUDENT GUIDE



CAAP



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Section 1—What is CAAP?

The Collegiate Assessment of Academic Proficiency (CAAP) is a set of standardized tests developed to measure student's achievement levels in up to six areas: Reading, Writing Skills, Writing Essay, Critical Thinking, Mathematics, and Science. Your school has chosen to assess student skills in specific areas using CAAP tests. The CAAP tests help your school evaluate the effectiveness of the education you and your classmates have received and identify areas that may need to be strengthened. The CAAP tests also help you and your advisor or guidance counselor evaluate your individual skill levels and determine how best to help you achieve academic success.

Your scores will be kept confidential, but CAAP will provide information on your achievement in selected academic skills. You will be able to compare your ability levels with other students at your school. Your test results may give you important insights about relative strengths and weaknesses as these relate to your future education or workplace success. If you score at or above the national mean on any CAAP module, you will also receive a Certificate of Achievement, which you can use as part of your portfolio or “academic profile” when pursuing graduate school or job opportunities.

Description of CAAP Tests

There are six CAAP tests in total. Five CAAP modules are multiple-choice tests and one is an essay test. The number of tests you take is determined by your college or university. Each test can be completed in a 50-minute class period. The following is a brief description of each test.

CAAP Reading Test

The CAAP Reading Test is a 36-item, 40-minute test that measures reading comprehension as a combination of referring and reasoning skills. Referring test questions pose questions about material explicitly stated in a passage. Reasoning test questions assess your ability at making appropriate inferences, demonstrating a critical understanding of text, or determining meanings of difficult, unfamiliar, or ambiguous words used in context.

CAAP Reading passages come from four general areas:

- Prose Fiction: Excerpts from short stories or novels
- Humanities: Art, music, philosophy, theater, architecture, dance
- Social Studies: History, political science, economics, anthropology, psychology, sociology
- Natural Sciences: Biology, chemistry, physics, physical sciences

CAAP Reading passages are representative of the kinds of text commonly found in college courses. Sample CAAP Reading Test questions are provided in Section 2.

CAAP Writing Skills Test

The CAAP Writing Skills Test is a 72-item, 40-minute test that measures your understanding of the conventions of standard written English (i.e., punctuation, grammar, sentence structure, strategy, organization, and style). The test consists of six passages, each of which is accompanied by a set of multiple-choice questions. A range of passages is used to provide a variety of text that is similar to the writing commonly found in college courses.

The test questions fall into two major categories: Usage/Mechanics and Rhetorical Skills. These categories and associated subskills are described below.

Usage/Mechanics: Test questions measure usage and mechanics skills and offer alternative responses, including “NO CHANGE,” to underlined portions of the passage. You must decide which answer option best fits the context. The following describe specific skills tested.

- Punctuation: Use and placement of commas, colons, semicolons, dashes, parentheses, apostrophes, and quotation, question, and exclamation marks
- Grammar: Adjectives and adverbs, conjunctions, and agreement between subject and verb and between pronouns and their antecedents
- Sentence Structure: Relationships between/among clauses, placement of modifiers, and shifts in construction

Rhetorical Skills: Test questions measure rhetorical skills and may refer to an underlined portion of the passage (e.g., sentence), a passage section (e.g., paragraph), or the passage as a whole. You must decide which answer option is most appropriate for a given situation. The following describe specific skills tested.

- Strategy: Appropriateness of expression for audience and purpose, supporting material to strengthen writing, effective choice of theme or purpose statements
- Organization: Organization of ideas, relevance of statements (order, coherence, unity)
- Style: Precision and appropriateness of word choice, effective management of sentence elements, avoidance of ambiguous pronoun references, economy in writing

Sample CAAP Writing Skills Test questions can be found in Section 2.

CAAP Writing Essay Test

The CAAP Writing Essay Test is a 40-minute test that consists of two writing tasks or prompts. Each of the two 20-minute writing tasks identifies a specific hypothetical situation or issue and audience. You must take a position on the issue and explain to the audience why the position taken is the better (or best) alternative. In order to clearly define the writing task and the intended audience, each task specifies the basis upon which the audience (e.g., “College Dean”) will make its decision.

CAAP Writing Essay Tests are evaluated according to how well you:

- Formulate an assertion about a given issue
- Support that assertion with evidence appropriate to the issue, position taken, and audience
- Organize and connect major ideas
- Express those ideas using clear, effective language

You will obtain a lower score if you do not take a position on the specified issue, support your position with reasons and evidence, develop your argument, or express ideas using clear, effective language.

This test has two parts, and you must respond to both parts. Because this is a test of your writing skills, your response to each writing task should include complete sentences and paragraphs. Essays should be as well organized and clearly written as you can make them in the time available. Essays that are illegible cannot be scored.

Tips for taking the essay test are provided at the end of this section. A sample CAAP Writing Essay Test writing task is provided in Section 2. The CAAP Writing Essay Test scoring guide can be found in Section 3.

CAAP Critical Thinking Test

The CAAP Critical Thinking Test is a 32-item, 40-minute test that measures skills at analyzing, evaluating, and extending arguments. An argument is defined as a sequence of statements that includes a claim that one of the statements, the conclusion, follows from the other statements. The CAAP Critical Thinking Test consists of four passages that are representative of the kinds of passages and issues commonly encountered in college or university courses.

A passage typically presents a series of subarguments in support of a more general conclusion or set of conclusions. Each passage presents one or more arguments using a variety of formats, including case studies, debates, dialogues, overlapping positions, statistical arguments, experimental results, or editorials. Sample CAAP Critical Thinking Test questions are provided in Section 2.

CAAP Mathematics Test

The CAAP Mathematics Test is a 35-item, 40-minute test that measures your ability to solve the types of problems typically encountered in college-level mathematics courses and upper-division courses in mathematics and other disciplines. The CAAP Mathematics Test emphasizes quantitative reasoning rather than the memorization of formulas. The areas covered in the test are described below.

- **Prealgebra**: Includes operations with whole numbers, decimals, and fractions; order concepts; percentages; averages; exponents; scientific notation
- **Elementary Algebra**: Includes basic operations with polynomials, setting up equations, and substituting values into algebraic expressions; may also require solution of linear equations in one variable and related topics
- **Intermediate Algebra**: Includes exponents, rational expressions, and systems of linear equations; quadratic formula and absolute value inequalities may also be tested
- **Coordinate Geometry**: Includes graphing in standard coordinate plane or the real number line, graphing conics, linear equations in two variables, graphing systems of equations
- **College Algebra**: Includes advanced algebra such as rational exponents, exponential and logarithmic functions, complex numbers, matrices, inverses of functions, domains and ranges
- **Trigonometry**: Includes concepts such as right triangle trigonometry, graphs of trigonometric functions, basic trigonometric identities, trigonometric equations and inequalities

Sample CAAP Mathematics Test questions can be found in Section 2.

CAAP Science Test

The CAAP Science Test is a 45-item, 40-minute test that measures knowledge and skills in the biological sciences (e.g., biology, botany, and zoology), chemistry, physics, and the physical sciences (e.g., geology, astronomy, and meteorology). The test emphasizes scientific knowledge and reasoning skills.

The CAAP Science Test consists of eight passages, each of which contains scientific information and a set of multiple-choice questions. A passage may focus on data representation (e.g., graph reading, interpretation of scatterplots, interpretation of information presented in tables, diagrams, and figures), research summaries (e.g., design of experiments and interpretation of results), or conflicting viewpoints (e.g., hypotheses or views that are mutually inconsistent owing to different premises, incomplete data, or differing interpretations). Test questions fall into three major categories that focus on an important element of scientific inquiry.

- Understanding: Identify and evaluate scientific concepts, assumptions, and components of an experimental design or process; identify and evaluate data presented in graphs, figures, or tables; translate given data into an alternate form
- Analyzing: Process information needed to draw conclusions or formulate hypotheses; determine whether information provided supports a given hypothesis or conclusion; evaluate, compare, and contrast experimental designs or viewpoints; specify alternative ways of testing hypotheses or viewpoints
- Generalizing: Extend information given to a broader or different context; generate a model consistent with given information; develop new procedures to gain new information; use given information to predict outcomes

Sample CAAP Science Test questions are provided in Section 2.

Information on Taking CAAP Tests

General CAAP Testing Information

Bring the following to the CAAP test administration:

- At least 3 sharpened soft-lead (No. 2) pencils with erasers and a black-ink pen if you are taking the CAAP Writing Essay Test.
- A calculator for the CAAP Mathematics Test if you would like to use one; however, all problems on the test can be solved without using calculators. Most four-function, scientific, and graphing calculators may be used. Appendix A contains specifics regarding CAAP calculator use.
- A wristwatch to pace yourself during the test. Do NOT bring a watch that has a calculator or alarm function.

NOTE: The use of scratch paper, notes, or dictionaries is NOT permitted on CAAP. Scratch work is to be done in the test booklet.

The following general test-taking strategies are recommended for CAAP:

- Pace yourself to allow time for each test question or writing essay
- Read the directions for each test carefully
- Answer the easier questions first
- Review your work
- Answer every question; there is no penalty for guessing
- Be precise in marking your answer sheet; stay within the circles
- Erase all unintended marks completely

Tips for Taking CAAP Writing Essay Test

Pace Yourself & Plan Before Writing

The CAAP Writing Essay Test consists of two writing tasks. You are given 20 minutes to read and think about the issue in each prompt, and to plan and write each essay. You should use this information to plan your writing time accordingly.

When asked to write an essay, most writers find it useful to do some planning before they start writing and to do a final check of the essay when it is finished. It is unlikely that you will have time to draft and fully revise your essay. Therefore, taking a few minutes to plan your essay before you begin writing is a good strategy.

Some writers like to plunge right in, but this is seldom a good way to do well on an essay writing task. Planning and prewriting gets you thinking about the issue, suggests patterns for presenting your thoughts, and allows you to come up with ideas for introducing and concluding your essay. Before writing, carefully read the prompt and make sure you understand it—reread it if you aren't sure. Decide how you want to address the issue in the prompt.

Write & Review Your Essay

Once you're ready to write your essay, proceed with the confidence that you have planned your writing. At the beginning of your essay, make sure readers see that you understand the issue. Explain your point of view in a clear and logical way. If possible, discuss the issue in a broader context. Address what others might say to refute your point of view and present a counterargument. Use specific examples. Vary the structure of your sentences, and use varied and precise word choices. Make logical relationships clear by using transitional words and phrases. Do not wander off the topic. End with a strong conclusion that summarizes or reinforces your position.

Students often ask whether it is a good idea to organize the essay by using a formula, like "the five-paragraph essay." Points are neither awarded nor deducted for following familiar formulas, so feel free to use one or not as you prefer. Some writers find formulas too limiting, while other writers find them to be useful.

As you write, remember that you have been asked to write a letter to a specific person or group who is looking for feedback regarding a particular issue. Your response is being written to persuade a person or group, so it's important that your essay be focused on your readers and their concerns. Begin your letter with an introduction; end your letter with a conclusion that summarizes the points you've made. Make sure that the audience understands your position at both the beginning and the end of your essay.

Take a few minutes before submitting your essay to read it over. Correct any mistakes in grammar, usage, punctuation, and spelling. Within the time available, try to make your essay as clear, focused, and polished as you can.

Review Scoring Expectations

ACT developed a six-point scoring system for the CAAP Writing Essay Test. Section 3 of this guide includes detailed information on how CAAP Writing Essay Tests are scored and how scores are reported. Review the CAAP scoring guide and associated score descriptions in Section 3 for specifics regarding CAAP Writing Essay Test scoring expectations.

Section 2—Sample CAAP Questions

The following examples illustrate the kind of questions you might find on the CAAP tests. Answers to sample questions can be found in Appendix B.

CAAP Reading Sample Questions

Passage I

Geysers are spectacular hydrothermal events. The word geyser is derived from an old Icelandic verb, *gjose*, meaning to erupt. It refers specifically to a reservoir of hot water that intermittently and explosively ejects part or all of its contents. Activity in most geyser areas ranges over a wide spectrum: quiescent hot pools, vigorously boiling pools, dry stream jets, mud pots, and geysers. Although there are several thousand hot springs in the world, there are not more than about 400 geysers. In Yellowstone National Park, the most extensive geyser area, the ratio of hot springs to geysers is about ten to one.

A geyser is essentially a hot spring but its unique characteristic is that it periodically becomes thermodynamically and hydrodynamically unstable. A very special set of circumstances must exist for a hot spring to erupt. It must have a source of heat. It must have a place to store water while it is heated up to just the right temperature, an opening of the optimum size out of which to throw the hot water, and underground channels adequate for bringing in fresh water after an eruption. Only very rarely does the right combination exist. When there is little water but intense heat, a steam vent called a fumarole exists. A mud pot occurs when the hot water is laden with dirt. If there is plenty of incoming water but it is comparatively cool, it is a hot pool; or if too hot, a spouter continuously spitting out steam and hot water. If the opening is too large or the reservoir so shaped that circulation can occur freely, instabilities may not be able to develop and the hot spring simply boils.

A geyser erupts when a part of its stored hot water becomes unstable, i.e., its heat content reaches some critical level of distribution. Abrupt and vigorous generation of steam occurs within the geyser comparatively close to its surface opening. The transformation of 1 g of water to steam can do as much work as the detonation of 1 g of explosive. Water in the form of steam occupies more than 1500 times as much volume as in the form of liquid, the same ratio as the gases generated by a solid explosive. The presence of steam greatly modifies both temperature and fluid distributions, forcibly throwing water out of the geyser and precipitating a full-fledged eruption. When the geyser has exhausted its excess heat and water, it returns to a stable condition, all set to begin a new cycle of instability. The buildup of heat usually results from hot water or steam entering the reservoir at a deep level, a few hundred to a few thousand meters below.

Although no two geysers are alike in all respects, most fall into one of two rather distinct classes and traditionally have been classed as fountain or pool, and columnar or cone geysers. Fountain or pool geysers are usually characterized by their surface pools of hot water. Their eruptions consist of series of steam and water explosions the source of which are blobs of superheated water which suddenly rise to the surface of the upper basin and flash into steam.

Columnar or cone geysers for the most part display cones or protuberances above their narrow subsurface tubes which are filled with water and are emptied partially or completely during eruptions. Their eruptions are precipitated when underlying superheated water down within the tube is heated to the point where steam bubbles begin to form. These bubbles reduce the . . . pressure of the overlying water column, more superheated water flashes into steam, and soon the whole tube empties itself catastrophically. . . .

Geysers are not common geologic features. They exist only here and there in a few widely separated, highly localized regions. The most famous areas are in Yellowstone National Park in northwestern United States, Iceland, the North Island of New Zealand, Kamchatka in northeastern USSR [Russia], and Japan. . . .

All of the principal geyser areas are found in volcanic regions. . . .

80 No geyser looks or acts the same as any other. Each has its own arrangement of reservoirs and tubes, water supply, and heat source. However, by closely observing the activity of individual geysers and groups of them, it is possible to learn much concerning the general nature of operational modes. . . .

90 Waimangu, the largest geyser ever observed to erupt, was very active from January 1900 to November 1904. Its dormant site is now almost unidentifiable by the growth of vegetation. When active, an eruption, occurring at about 36 hr intervals, threw jets of mud, rocks, water, and steam to heights of up to 450 m in one large explosive burst. . . .

Old Faithful is perhaps the best known in the world. . . .

95 [Its] eruption is heralded by premonitory splashes that rise to a height of a few meters. The eruption starts with a higher splash, quickly followed by another and another, each noisily rising to a greater height before the others have completely fallen to the ground. It takes a minute or two for the ebullient column of gushing water to reach its peak. One or two spurts may shoot even higher before the column begins to fall in easy stages. Total water play will last from 2 to 5 min, followed by several minutes of steam play during which steam in great quantities billows out of the opening. . . . The time to the next eruption can range from 30 to 100 min. It is predictable to within 5 min based on its just-passed length of play.

From John S. Rinehart, *Geysers and Geothermal Energy*. ©1980 by Springer-Verlag New York, Inc.

1. The production of steam causes the eruption of a geyser because:
 - A. steam is lighter than water.
 - B. geysers require intense heat.
 - C. steam takes up more space than water.
 - D. hot water rises while cold water sinks.

2. If the water supply to a geyser were greatly reduced, it is most likely that the geyser would become a:
 - F. mud pot.
 - G. spouter.
 - H. hot pool.
 - J. fumarole.

3. According to the passage, geysers are most likely to occur:
 - A. near the equator.
 - B. in cold climates.
 - C. in volcanic regions.
 - D. at low altitudes.

4. For a geyser to exist, each of the following conditions must be present EXCEPT:
 - F. a source of heat.
 - G. a protuberance above the surface.
 - H. a system to supply fresh water.
 - J. a place to store water.

5. A hot spring that continually shoots out steam and hot water is called a:
 - A. spouter.
 - B. geyser.
 - C. fumarole.
 - D. hot pool.

6. One of the most famous geyser areas is located in:
 - F. Greenland.
 - G. Panama.
 - H. China.
 - J. New Zealand.

7. Compared to those of Old Faithful, the eruptions of Waimangu can most accurately be characterized as:
- I. more explosive.
 - II. of longer duration.
 - III. more frequent.
- A. I only
 - B. II only
 - C. III only
 - D. I and II only
8. A geyser is a hot spring in which both the water temperature and the amount of water present:
- F. fluctuate periodically.
 - G. cause vigorous boiling.
 - H. are constant.
 - J. maintain thermodynamic equity.
9. All of the following characteristics will usually differ from geyser to geyser EXCEPT:
- A. type of geographic location.
 - B. type of surface opening.
 - C. arrangement of reservoirs and tubes.
 - D. source of heat.

NOTE: Answers to sample CAAP Reading Test questions can be found in Appendix B.

CAAP Writing Skills Sample Questions

PASSAGE I

[1]

If you asked most Americans what they thought about television commercials they'd probably, roll their eyes.

1

Many of us resent how commercials disrupt as well as
interrupt our favorite programs with messages about
products in which we have little interest. When
commercials appear, we visit the refrigerator by hitting
the mute button or even switch channels.

2

3

1. A. NO CHANGE
B. commercials they'd, probably
C. commercials they'd probably
D. commercials, they'd probably
2. F. NO CHANGE
G. constantly interfere with,
H. break in on and
J. OMIT the underlined portion.
3. A. NO CHANGE
B. or hitting
C. or hit
D. hitting

[2]

When we actually sit and watch
commercials, we often find them to be silly.

If watched or not, commercials seem to work.

4

How is it that commercials can persuade us to buy

products which we react to their message with such

5

boredom, indifference, and even scorn?

4. F. NO CHANGE
G. Even so,
H. Yes;
J. Looking at them,
5. A. NO CHANGE
B. products? When
C. products. When
D. products when

[3]

[1] Some psychologists argue that commercials actually work best when we aren't paying much attention. [2] When a television viewer's mind is relaxed and wandering they argue commercials have a better chance of lodging their message somewhere within, almost like a hypnotic suggestion. [3] Attentive viewers, in contrast, might respond so much more critically that they are not found by the advertising message

persuasive. 8

6. F. NO CHANGE
G. wandering; they argue,
H. wandering, they argue,
J. wandering they argue,
7. A. NO CHANGE
B. would not find
C. will not found
D. would not have found
8. The writer is considering adding the following sentence to Paragraph 3:
- Their idea, while initially seeming quite illogical, makes more sense the more you think about it.
- If added, this sentence would most logically be placed:
- F. before Sentence 1.
G. after Sentence 1.
H. after Sentence 2.
J. after Sentence 3.

[4]

Another theory suggests that if viewers need a particular product, they will get an automatic perk when a commercial featuring that product comes on. Let's say, for example, that my hair dryer seemed to take forever to do its job. I would then, presumably, start taking a closer look at commercials showing hair dryers doing there₉ work properly.

9. A. NO CHANGE
B. its
C. it's
D. their

[5]

A third theory has it that commercials work via peer pressure, that the characters in commercials are like people we know, and that we respond to their familiarity. Thus, no matter how silly we find a commercial, we come away with the idea that people who like what they know and use the products shown.

10

Can it be that such peer pressure can make us buy something we never thought of owning? Who knows? Perhaps we need to study television commercials even more closely to see which, if any, of the above theories are most true.

11

10. F. NO CHANGE
G. who are like what they know will
H. we know and like
J. who are like us and
11. A. NO CHANGE
B. true.
C. truly true.
D. truest.

Question 12 asks about the preceding passage as a whole.

- 12.** The writer has been asked to expand upon the theory that we respond to commercials only if we need a certain product being advertised. If the writer follows this suggestion, it would be logical to add such material after Paragraph:
- F.** 1, because that paragraph introduces the subject of this essay.
 - G.** 2, because that paragraph shows how we think of commercials as silly unless they appeal directly to something in our lives.
 - H.** 4, because the point of that paragraph is to demonstrate how commercials work only if the product interests us on a practical level.
 - J.** 4, because hair dryers are something many people use daily and they are also a product that the essay tells us needs to be replaced frequently.

NOTE: Answers to sample CAAP Writing Skills Test questions can be found in Appendix B.

CAAP Writing Essay Sample Writing Task

Your college is considering a requirement that all students take and pass a writing course specifically designed for their major area of study. The Dean of Academic Affairs has asked students to express their opinions on the proposed requirement, stating that the final decision will be based on what would best prepare students for their careers following graduation. Write a letter to the dean arguing for or against the proposed requirement of a writing course for each major, explaining how the position you advocate would best prepare students for their careers following graduation.

(Do not concern yourself with letter formatting; simply begin your letter, “Dear Academic Dean.”)

NOTE: Section 1 of this guide includes tips for taking the CAAP Writing Essay Test. Section 3 of this guide includes the CAAP scoring guide. Reviewing the tips in Section 1 and the scoring guide in Section 3 may help you prepare to take the CAAP Writing Essay Test.

CAAP Critical Thinking Sample Questions

Passage II

The college at which Professor Burke teaches regularly asks students to evaluate faculty teaching performance. The announced purpose of these evaluations is to give information to faculty about their strengths and weaknesses as teachers, and to allow those who make decisions about salary increases and promotions to reward the better teachers. Professor Burke, who never does very well on those evaluations, recently wrote the following letter of objection to the college president:

10 “It has become common practice in many colleges and universities for students to write formal evaluations of their professors and submit these to those who make salary and promotion decisions. Of course we do that here as well. This practice is supposed to provide valuable evidence both to faculty members and to decision makers regarding how well the faculty are teaching their courses. Despite all that, I believe this practice has so many undesirable consequences that it ought to be abandoned. I grant that those who advocate the use of student opinion surveys as a way of evaluating teaching have laudable goals. However, they have overlooked the disastrous effects which inevitably flow from this practice.

In order for students to learn effectively, two
25 requirements must be met: Students must be informed
when they are in error, and they must be challenged to
stretch their minds as far as possible. But this requires
faculty members to be frank in criticizing student work.
It also requires faculty members to set high standards
30 so as to challenge all students to develop fully. Should
a faculty member come to fear that being critical
toward student work will result in loss of salary raises
and denial of promotions, that faculty member is not
likely to make critical comments when they are needed.
35 Should a faculty member come to fear that maintaining
high academic standards will also result in loss of
raises and denial of promotions, that faculty member is
not likely to set high standards. These things are
exactly what happens when student evaluations are
40 used by colleges to help make salary and promotion
decisions. These things are happening here.

It doesn't take long for a faculty member to dis-
cover that many students react negatively to criticism,
and that most students feel quite put upon when they
45 are expected really to strive in a course outside of their
major fields. True, some students do respond positively
to a challenge, and many take criticism well, but what
about those who don't? By not being critical and by
having low standards, a faculty member can keep every
50 student happy. By being critical and setting high stan-
dards, a faculty member runs the risk of making only a
few students happy. There is no payoff for the faculty
member in alienating a significant number of those who
will be filling out the course evaluation form at the end
55 of the term, when the results of those forms will be con-
sidered in future decisions about the faculty member's
career advancement. Several of my colleagues have
deliberately lowered their standards in order to curry
student favor on these evaluations, and I note they have
60 done far better than I in getting raises in recent years.

Because of these factors, student evaluation of college faculty represents an important pressure to lower academic standards. Such erosion in standards of achievement tends, of course, to promote a general climate of mediocrity in which no one expects of any student anything more than average performance. Students who have the ability to do better than average lose out from this process by not being encouraged to become all they can be. And society simply cannot afford to continue to allow this weakening of our educational system when the crying need is for ever larger numbers of well-trained, well-educated citizens.

Thus, for the benefit of students and society alike, we must stop using student opinion surveys to evaluate college faculty performance for salary and promotion decisions. It would be far better to ask certain selected faculty members to write evaluations of the teaching performance of other faculty members, based on classroom visits. This would avoid the difficulties described above and give us expert, objective opinions about teaching performance, which could be used as evidence for making salary and promotion decisions.

I urge you to take whatever action is necessary to bring about these changes on our campus.”

9. Which of the following is a conclusion which Professor Burke *argues for* in this passage?
- A. There is a crying need for large numbers of well-trained, well-educated citizens in our society.
 - B. Some of Burke’s fellow faculty members lowered their standards in order to get better student evaluations of their teaching.
 - C. The practice of using student evaluations of teaching performance as evidence for faculty salary decisions has very undesirable consequences.
 - D. If a faculty member fears that maintaining high standards will result in loss of salary raises, that faculty member will not be likely to maintain high standards.

10. From what is said in this passage, we can see Professor Burke explicitly assumes without argument that:
- F. students today are less academically ambitious and more critical of their instructors than students used to be.
 - G. effective student learning requires that students be told of their mistakes.
 - H. administrators believe all the negative comments made by students about faculty teaching.
 - J. students lack the background necessary for making accurate judgments regarding faculty knowledge of course subject matter.
11. Burke claims that a faculty member can keep every student happy by not being critical and by having low standards, while that faculty member can make only a few good students happy by being critical and having high standards. What's the *immediate* point of these remarks?
- A. When a faculty member is critical and has high standards, that benefits only a few good students.
 - B. Unfortunately, there are more weak than good students attending the college where Burke teaches.
 - C. Using student evaluations for making salary and promotion decisions leads to desirable results.
 - D. There is no reward for the critical faculty member with high standards in a school that uses student evaluations in salary and promotion decisions.
12. Burke mentions some colleagues who lowered their standards and subsequently received higher raises than Burke. In order to make the overall argument as logical as possible, what does Burke need to establish with respect to these cases?
- F. That these teachers are not as good at teaching as Burke
 - G. That the higher raises were due in part to the lowering of academic standards mentioned
 - H. That the higher raises were not merely some sort of accidental quirk in the salary system
 - J. That the standards maintained by these faculty before they lowered their standards were unreasonably high

13. Although the passage does not explicitly say so, Burke is apparently assuming that:
- A. students generally feel that faculty criticism of their work is unfairly harsh.
 - B. students who react negatively to criticism and challenge will not give a favorable rating to the teaching of demanding instructors.
 - C. most faculty members at Burke's college have lowered their standards in response to pressures created by student evaluation of instruction.
 - D. being willing to criticize student work when needed and maintaining high academic standards are the two most important aspects of good teaching.
14. Given what Burke says in the passage, which of the following statements would Burke most likely agree with?
- F. Student evaluations of faculty performance provide useful information for decision making about faculty salaries and promotions.
 - G. All students desire their college courses to be less demanding than reasonable faculty members do.
 - H. There are disadvantages associated with the use of student evaluations as evidence in salary and promotion decisions.
 - J. There is a real danger that students will deliberately use evaluations of faculty performance to lower academic standards.

15. Which one of the following, if known to be true, would do the most to undermine Burke's argument in favor of having faculty, rather than students, evaluate teaching performance?
- A. Faculty are generally reluctant to have other faculty members visit their classrooms.
 - B. Most faculty members who would do the evaluating believe in upholding reasonably high academic standards.
 - C. Most faculty members who would do the evaluating believe that it is possible to be too highly critical of student work.
 - D. Because of personal relationships between faculty members, those who would do the evaluating could not be good judges of teaching performance.
16. In a school that uses student evaluation of instruction as evidence in salary and promotion decisions, according to Burke, the following three items are related to one another:
- I. Faculty members fear that being critical of student work will have bad career consequences for the faculty member.
 - II. Faculty members experience negative student reaction to criticism of student work.
 - III. Undesirable educational practices are promoted at the institution.

Which of the following represents the most satisfactory summary of the logical relations between I, II, and III as Burke sees them?

- F. I and II cause III.
- G. I promotes II, and II causes III.
- H. II causes I which then results in III.
- J. III causes II which in turn results in I.

NOTE: Answers to sample CAAP Critical Thinking Test questions can be found in Appendix B.

CAAP Mathematics Sample Questions

1. $4^3 + (5 \times 3)^2 = ?$

- A. 42
- B. 128
- C. 289
- D. 337
- E. 481

3. At 1:00 p.m. a car leaves St. Louis for Chicago, traveling at a constant speed of 65 miles per hour. At 2:00 p.m. a truck leaves Chicago for St. Louis, traveling at a constant speed of 55 miles per hour. If it is a 305-mile drive between St. Louis and Chicago, at what time will the car and truck pass each other?

- A. 2:30 p.m.
- B. 3:00 p.m.
- C. 4:00 p.m.
- D. 4:30 p.m.
- E. 5:00 p.m.

4. For all $x \neq 0$ and $y \neq 0$, $\frac{(2x^{-3}y^4)^3}{(4xy)^2} = ?$

- F. $\frac{y^{10}}{2}$
- G. $\frac{2y^{10}}{x^{10}}$
- H. $\frac{y^{10}}{2x^{11}}$
- J. $\frac{y^3}{2x^2}$
- K. $\frac{y^9}{4x^4}$

5. If 0.00005893 is expressed in the form 5.893×10^n , what is the value of n ?

- A. -5
- B. -4
- C. 4
- D. 5
- E. 8

6. What is the value of $3 + 6 \div 2 - 4 \times 3$?

- F. -13.5
- G. -6.0
- H. 0.0
- J. 1.5
- K. 2.0

7. What is the sum of $(x + 2y)^2$ and $(x - y)^2$?

- A. $2x^2 + 3y^2$
- B. $2x^2 + 5y^2$
- C. $2x^2 + 2xy + 5y^2$
- D. $4x^2 + y^2$
- E. $4x^2 + 4xy + y^2$

10. Which of the following expresses the complete solution, for x , to the inequality shown below?

$$3x - 5 > 5x - 9$$

- F. $x > -\frac{7}{4}$
- G. $x > 2$
- H. $x < 2$
- J. $x > -2$
- K. $x < -2$

12. The owner of a store displays a large jar of nickels and dimes and offers the value of the coins to the person who guesses how many dimes there are. If there are 1,130 coins, and they are worth \$100, how many dimes are there?

F. 130
G. 260
H. 870
J. 970
K. 1,000

13. In simplified form, $\frac{24x^4z^{-2}}{8x^{-3}z} = ?$

A. $\frac{3x}{z}$
B. $\frac{16x^7}{z}$
C. $\frac{3x^7}{z^3}$
D. $16xz$
E. $3x^7z^3$

18. If $f(x) = 2x + 7$, $g(x) = 3x - 5$, and $h(x) = 2x + 6$, then $h(x) + [f(x) \cdot g(x)] - 6 = ?$

F. $7x + 2$
G. $7x + 8$
H. $6x^2 + 13x - 29$
J. $6x^2 + 13x - 35$
K. $12x^2 - 5x - 143$

20. If $\log_x\left(\frac{1}{4}\right) = -\frac{2}{3}$, then what is the value of x ?

F. 32

G. 8

H. $\frac{1}{8}$

J. $-\frac{1}{8}$

K. -8

31. If $\sin 2x = \sin x$, then which of the following could NOT be true?

A. $x = 0$

B. $x = \frac{-\pi}{3}$

C. $\cos x = \frac{1}{2}$

D. $\sin x = 0$

E. $\cos x = 0$

NOTE: Answers to sample CAAP Mathematics Test questions can be found in Appendix B.

CAAP Science Sample Questions

Passage II

The relationship between an applied force and the resulting acceleration of a cart carrying different masses is studied. (See Figure 1.) The cart moves from A to B, and distance and time measurements are made. Laboratory weights are used for the applied force. The surface over which the cart travels is level and nearly frictionless.

A timer that makes a mark every .1 second is attached to the underside of the cart. The marks are recorded on a strip of paper that lies flat on the surface over which the cart travels. The timer starts simultaneously with the release of the cart. The marks on the paper are measured, and the distance from Point A is recorded. The distances represent the location of the cart after each .1 second interval. Velocity was calculated at each data point.

Average acceleration was calculated by dividing the change in velocity for each interval by the length of time of each interval. The measured and calculated data are given in Table 1.

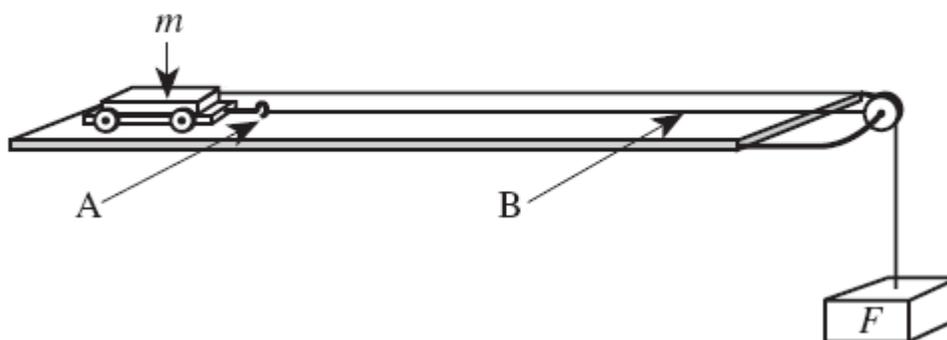


Figure 1

Table 1						
Trial	Data point	Force (newtons)	Mass (kg)	Distance from A (m)	Velocity (m/s)	Average acceleration (m/s ²)
1	1	.5	.20	.010	.20	2.0
	2	.5	.20	.040	.40	2.0
	3	.5	.20	.090	.60	2.0
	4	.5	.20	.160	.80	2.0
2	1	2.0	.20	.025	.49	4.9
	2	2.0	.20	.098	.98	4.9
	3	2.0	.20	.220	1.47	4.9
	4	2.0	.20	.392	1.96	4.9
3	1	2.0	.10	.033	.65	6.5
	2	2.0	.10	.130	1.30	6.5
	3	2.0	.10	.293	1.95	6.5
	4	2.0	.10	.520	2.60	6.5

kg = kilograms
m = meters
s = seconds

7. If data had been collected for a fifth data point in Trial 1, what would the velocity have been?
- A. .80 m/s
B. 1.00 m/s
C. 1.20 m/s
D. 1.40 m/s
8. If the 3 trials could be run simultaneously on parallel setups, in what order, from first to last, would the carts get to Point B ?
- F. Trial 1, Trial 2, Trial 3
G. Trial 1, Trial 3, Trial 2
H. Trial 2, Trial 1, Trial 3
J. Trial 3, Trial 2, Trial 1

9. Mass is added to the cart by the addition of a wooden block that rests on top of it. When the force is increased to 4.0 newtons, the block falls off as the cart begins to accelerate. Why does it fall off when the force is increased to this level?
- A. The force accelerating the cart becomes large enough so that the force of friction holding the block on is overcome.
 - B. The force of friction holding the block in place becomes large enough to overcome the force accelerating the cart.
 - C. The mass of the cart becomes too large, and the load must be reduced for the cart to accelerate.
 - D. The acceleration becomes nonuniform with this force.
10. Another experiment showed the velocities for a trial to be 1.0 m/s, 2.5 m/s, 4.5 m/s, and 7.0 m/s when measured in the same way. What trend occurred in the average acceleration?
- F. It was constant.
 - G. It decreased by 10.0 m/s^2 each interval.
 - H. It decreased by 5.0 m/s^2 each interval.
 - J. It increased by 5.0 m/s^2 each interval.
11. If Trial 3 were redone with a force of 1.0 newton, then compared to that found in Trial 3, the average acceleration would be:
- A. initially lower and decreasing.
 - B. initially lower and constant.
 - C. the same.
 - D. initially higher but decreasing.

NOTE: Answers to sample CAAP Science Test questions can be found in Appendix B.

Section 3—Understanding Your CAAP Results

After you finish the CAAP tests and scoring is completed, you will receive a CAAP Student Score Report. The Student Score Report lists your identification information, self-reported background characteristics, your scores, and, if applicable, subtest scores for each test module that you took. Additionally, your Student Score Report will indicate the percentage of students who scored at or below your level on both a local and national basis. In addition, if your scores are at or above the national mean, you will receive a CAAP Certificate of Achievement.

CAAP Multiple-choice Test Scores

Scores for the CAAP Writing Skills, Mathematics, Reading, Critical Thinking, and Science Tests are reported on a scale that ranges from 40 (low) to 80 (high) for the total test score and 5 (low) to 25 (high) for the subtest scores.

ACT provides two types of normative information so that you can compare your performance with that of other examinees:

- **Local Comparison:** One level of information is based on the CAAP scores of students at your institution—see column labeled “% of local students at or below score.”
- **National Comparison:** The other type is based on the CAAP scores of sophomores from institutions nationwide—see column labeled “% of students nationally at or below score.”

The normative information is reported as the percentage of examinees scoring at or below each of your scores. Both types of information (local and national) may be interpreted in the same manner. For example, if you earned a score of 64 on the CAAP Writing Skills Test and this score corresponds to 59% at or below (reported in the column labeled “% of students nationally at or below score”), this means that 59% of the sophomores nationwide who took the Writing Skills Test received a score of 64 or lower.

CAAP Writing Essay Test Scores

For the CAAP Writing Essay Test, ACT developed a six-point, modified holistic scoring guide. CAAP essays are evaluated according to how well you:

- Formulate an assertion about a given issue
- Support that assertion with evidence appropriate to the issue, position taken, and a given audience
- Organize and connect major ideas
- Express those ideas using clear, effective language

Each essay is read by two trained raters who independently score the essay on a scale from 1 to 6, with 1 being the lowest score and 6 the highest. The scores from the two raters for each of the two essays (four scores) are averaged for the reported CAAP Writing Essay Test score, which ranges from 1 to 6 in increments of 0.5. The composite score for the two essays is reported on the same score scale (1 to 6) as the two individual essays.

A copy of the CAAP Writing Essay Test scoring guide follows. This scoring guide provides important details regarding expectations for CAAP essays.

NOTE: Because the composite score represents your average performance on the two individual essays, it is not directly linked to the descriptive guidelines that follow.

CAAP Writing Essay Test Score Point Descriptions

Upper-range papers. These papers clearly engage the issue identified in the prompt and demonstrate superior skill in organizing, developing, and conveying in standard written English the writer's ideas about the topic.

6 Exceptional. These papers take a position on the issue defined in the prompt and support that position with extensive elaboration. Organization is unified and coherent. While there may be a few errors in mechanics, usage, or sentence structure, outstanding command of the language is apparent.

5 Superior. These papers take a position on the issue defined in the prompt and support that position with moderate elaboration. Organization is unified and coherent. While there may be a few errors in mechanics, usage, or sentence structure, command of the language is apparent.

Mid-range papers. Papers in the middle range demonstrate engagement with the issue identified in the prompt but do not demonstrate the evidence of writing skill that would mark them as outstanding.

4 Competent. These papers take a position on the issue defined in the prompt and support that position with some elaboration or explanation. Organization is generally clear. A competency with language is apparent, even though there may be some errors in mechanics, usage, or sentence structure.

3 Adequate. These papers take a position on the issue defined in the prompt and support that position but with only a little elaboration or explanation. Organization is clear enough to follow without difficulty. A control of the language is apparent, even though there may be numerous errors in mechanics, usage, or sentence structure.

Lower-range papers. Papers in the lower range fail in some way to demonstrate proficiency in language use, clarity of organization, or engagement of the issue identified in the prompt.

2 Weak. While these papers take a position on the issue defined in the prompt, they may show significant problems in one or more of several areas, making the writer's ideas often difficult to follow: support may be extremely minimal; organization may lack clear movement or connectedness; or there may be a pattern of errors in mechanics, usage, or sentence structure that significantly interferes with understanding the writer's ideas.

1 Inadequate. These papers show a failed attempt to engage the issue defined in the prompt, lack support, or have problems with organization or language so severe as to make the writer's ideas very difficult to follow.

Unrateable papers.

Essay papers are unrateable for one of the following reasons: the writing shows a refusal to engage the issue identified in the prompt, the writing is illegible, there is no response, or the paper is not written in English. If one of the two individual essays is unrateable and reported as 0, the composite essay will be reported as 0.

Appendix A—Use of Calculators on the CAAP Mathematics Test

ACT permits the use of calculators on the CAAP Mathematics Test for examinees who wish to use them; however, all problems on the test can be solved without using calculators.

- You decide whether to use a calculator on the CAAP Mathematics Test. If you regularly use one in class or when doing your homework, it makes sense to use one on the test. But if you aren't comfortable using a calculator, you may decide not to use one on the test. You can always bring one and decide not to use it. Pack it the night before so you won't forget it in the morning.
- If you decide to use a calculator, make sure it is the type you are used to at school or at home (but not one of the kinds of calculators not permitted).
- You **may not** use these calculators:
 - pocket organizers
 - handheld or laptop computers
 - electronic writing pads or pen-input devices
 - calculators built into cellular phones or other wireless communication devices
 - models with a QWERTY (typewriter) keypad. (Calculators with letters on the keys are permitted as long as the keys are **not** arranged in QWERTY format.)
 - models with built-in Computer Algebra Systems (capability to simplify algebraic expressions, multiply polynomials, or factor polynomials; see “More Information” section that follows)

Prohibited calculators include **all** calculators in **all** of the following series:

- Casio CFX-9970G (including, for example, CFX-9970GE)
 - Casio Algebra fx 2.0
 - Hewlett-Packard HP-40G
 - Hewlett-Packard HP-49G
 - Texas Instruments TI-89
 - Texas Instruments TI-92 (including, for example, TI-92 Plus)
- The following types of calculators are permitted only if they are used as noted:
 - models with paper tapes: *The paper must be removed.*
 - models that make noise: *The sound feature must be turned off.*
 - models that can communicate (transfer data or information) wirelessly with other calculators: *The wireless transfer capability must be disabled by placing heavy opaque material (such as duct tape or electrician's tape) over the infrared data port.*
 - models that have a power cord: *The electrical cord must be removed.*
 - You **may** use any four-function, scientific, or graphing calculator, as long as it doesn't have any of the features on the list.
 - If you plan to use a calculator, you must bring one to the test center. Don't forget to bring it with you. You can't share calculators and the test center supervisor will **not** lend you one.
 - Make sure your calculator works properly. Bring a spare calculator and extra batteries, if you wish. Test supervisors will **not** have extra batteries or calculators.

- You may use a calculator **only** on the Mathematics Test.
- If you bring a calculator, the test supervisor will make sure that
 - you are using an acceptable type of calculator;
 - you use your backup calculator only if your primary calculator fails;
 - you do **not** share your calculator with any other test taker;
 - you do **not** use your calculator's memory to store any test materials; and
 - you use your calculator **only** on the Mathematics Test.
- If your calculator has large characters (one-inch high or larger) or a raised display, the supervisor may assign you to a seat where no other test taker can see your calculator.

More Information about Specific Calculator Models

All calculators in **all** of the following series are **prohibited** because they have built-in Computer Algebra Systems: Casio CFX-9970G and Algebra fx 2.0, Hewlett-Packard HP-40G and HP-49G, and Texas Instruments TI-89.

All calculators in the Texas Instruments TI-92 series are **prohibited** because they have QWERTY (typewriter) keyboards and built-in Computer Algebra Systems.

Calculators in the Hewlett-Packard HP-38G series and HP-48G series may be used **only** if the infrared communications port is covered with heavy opaque material such as duct tape or electrician's tape.

The Sharp EL-9600 **is permitted** for use, because it is not considered a pen-input device. You may bring the stylus that comes with the calculator.

Appendix B—CAAP Sample Question Answers

CAAP Reading

Sample Passage 1

Excerpt from: *Geysers and Geothermal Energy*

Natural Science

Question #	Correct Answer	Content Category
1	C	Reasoning
2	J	Reasoning
3	C	Referring
4	G	Referring
5	A	Referring
6	J	Referring
7	A	Reasoning
8	F	Reasoning
9	A	Reasoning

CAAP Writing Skills

Sample Passage 1 Television Commercials Informational Passage

Question #	Correct Answer	Content Category
1	D	Usage/Mechanics–Punctuation
2	J	Rhetorical Skills–Style
3	C	Rhetorical Skills–Style
4	G	Rhetorical Skills–Style
5	D	Usage/Mechanics–Sentence Structure
6	H	Usage/Mechanics–Punctuation
7	B	Usage/Mechanics–Grammar
8	G	Rhetorical Skills–Strategy
9	D	Usage/Mechanics–Grammar
10	H	Rhetorical Skills–Strategy
11	B	Usage/Mechanics–Grammar
12	H	Rhetorical Skills–Strategy

CAAP Critical Thinking

Sample Passage 2 Faculty Evaluations

Question #	Correct Answer	Content Category
9	C	Analyzing an Argument
10	G	Analyzing an Argument
11	D	Analyzing an Argument
12	G	Evaluating an Argument
13	B	Analyzing an Argument
14	H	Analyzing an Argument
15	D	Extending an Argument
16	H	Evaluating an Argument

CAAP Mathematics

Question #	Correct Answer	Content Category
1	C	Prealgebra
3	C	Elementary Algebra
4	H	Intermediate Algebra
5	A	Prealgebra
6	G	Prealgebra
7	C	Elementary Algebra
10	H	Coordinate Geometry
12	H	Intermediate Algebra
13	C	Intermediate Algebra
18	J	College Algebra
20	G	College Algebra
31	E	Trigonometry

CAAP Science

Sample Passage 2 Applied Force and Different Masses Physics/Mechanical

Question #	Correct Answer	Content Category
7	B	Generalizing
8	J	Analyzing
9	A	Analyzing
10	J	Analyzing
11	B	Analyzing