



Chapter 1: About the ACT

The ACT measures your achievement in core academic areas important for your college and career success: English, math, reading, science, and (optionally) writing. It isn't an IQ test—it doesn't measure your basic intelligence. It's an achievement test that's been carefully designed—using surveys of classroom teachers, reviews of curriculum guides for schools all over the country, and advice from curriculum specialists and college faculty members—to be one of several effective tools for evaluating your college and career readiness.

The individual tests that make up the ACT consist of questions that measure your knowledge and skills. You're not required to memorize facts or vocabulary to do well on the ACT. Of course, all the terms, formulas, and other information you learned in your classes will be useful to you when you take the ACT. However, last-minute cramming (such as memorizing 5,000 vocabulary words or the entire periodic table of elements) won't directly improve your performance on the ACT.

Description of the ACT

The ACT consists of four multiple-choice tests—English, mathematics, reading, and science—and an optional writing test. Topics covered on these five tests correspond very closely to topics covered in typical high school classes. Table 1.1 gives you a snapshot of all five tests.

Table 1.1: ACT Tests			
Test	Questions	Time	Content Covered
English	75 questions	45 minutes	Measures standard written English knowledge and skills along with English language conventions
Mathematics	60 questions	60 minutes	Measures mathematical skills students have typically acquired in courses taken up to the beginning of grade 12
Reading	40 questions	35 minutes	Measures reading comprehension
Science	40 questions	35 minutes	Measures the interpretation, analysis, evaluation, reasoning, and problem-solving skills required in the natural sciences
Writing (optional)	1 prompt	40 minutes	Measures writing skills emphasized in high school English classes and in entry-level college composition courses

Questions on the tests are intended to help assess college and career readiness. The following sections provide an overview of what you should know to perform well on each test. For additional details, check out the ACT College and Career Readiness Standards presented in chapter 12.

English Test

75 questions, 45 minutes

The English test consists of five essays or passages, each of which is accompanied by a sequence of multiple-choice test questions. Different passage types are employed to provide a variety of rhetorical situations. Passages are chosen not only for their appropriateness in assessing writing skills but also to reflect students' interests and experiences.

Passages and their accompanying questions test knowledge and skills related to Production of Writing; Knowledge of Language; and Conventions of Standard English Grammar, Usage, and Punctuation.

You will receive four scores for the ACT English test: a total test score based on all 75 questions and three reporting category scores based on the following:

- Production of Writing
- Knowledge of Language
- Conventions of Standard English Grammar, Usage, and Punctuation

Production of Writing

Production of Writing tests knowledge and skills in two areas of English composition:

- Topic development in terms of purpose and focus
- Organization, unity, and cohesion

Topic Development in Terms of Purpose and Focus

Examples of knowledge and skills tested include the following:

- Determine the relevance of material to the topic or the focus of the passage or paragraph.
- Identify the purpose of a word or phrase (for example, identify a person, define a term, or describe an object).
- Determine whether a passage has met a specific goal.
- Use a word, phrase, or sentence to accomplish a specific purpose, such as convey a feeling or attitude or illustrate a given statement.

Organization, Unity, and Cohesion

Examples of knowledge and skills tested include the following:

- Determine the need for transition words or phrases to define relationships in terms of time or logic.
- Determine the most logical place for a sentence in a paragraph.
- Provide a suitable conclusion for a paragraph or passage (for example, summarizing the main idea).
- Provide a suitable introduction for a paragraph or passage.
- Rearrange sentences in a paragraph or paragraphs in a passage to establish a logical flow.
- Determine the most logical place to divide a paragraph to achieve the stated goal.

Knowledge of Language

Knowledge of Language questions test your ability to clearly and succinctly express yourself in written English. Knowledge and skills tested include the following:

- Revise unclear, clumsy, and confusing writing.
- Delete redundant and wordy material.
- Revise an expression to make it conform to the style and tone used throughout the passage.

- Determine the need for conjunctions to create logical connections between clauses.
- Choose the most appropriate word or phrase in terms of the sentence content.

Conventions of Standard English Grammar, Usage, and Punctuation

Conventions of Standard English Grammar, Usage, and Punctuation questions test knowledge and skills such as the following:

- Determine the need for punctuation or conjunctions to join clauses or to correct awkward-sounding fragments, fused sentences, and faulty subordination and coordination of clauses.
- Recognize and correct inappropriate shifts in verb tense.
- Recognize and correct disturbances in sentence structure, such as faulty placement of adjectives, participial phrase fragments, missing or incorrect relative pronouns, dangling or misplaced modifiers, faulty parallelism, run-on sentences, and weak conjunctions between independent clauses.
- Maintain consistent and logical verb tense and voice and pronoun person within a paragraph or passage.

Note: Spelling, vocabulary, and rote recall of grammar rules are not tested.

Mathematics Test

60 questions, 60 minutes

The mathematics test presents multiple-choice questions that require you to use reasoning skills to solve practical math problems. Some questions may belong to a set of several questions (for example, several questions about the same graph or chart).

Conceptual knowledge and computational skills are assumed as background for the problems, but recall of complex formulas and extensive computation is not required.

Nine scores are reported for the ACT mathematics test: a total test score based on all 60 questions and eight reporting category scores based on specific mathematical knowledge and skills. The reporting categories are:

- Preparing for Higher Mathematics, which includes separate scores for Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability
- Integrating Essential Skills
- Modeling

Preparing for Higher Mathematics

This category captures the more recent mathematics that students are learning, starting when they begin using algebra as a general way of expressing and solving equations. This category is divided into the following five subcategories:

- Number and Quantity
- Algebra
- Functions
- Geometry
- Statistics and Probability

Number and Quantity

Math questions in this category test your knowledge of numbers and fundamental math concepts and operations, including the following:

- Perform calculations on whole numbers and decimals.
- Recognize equivalent fractions and fractions in lowest terms.
- Locate rational numbers (whole numbers, fractions, decimals, and mixed numbers) on the number line.
- Recognize single-digit factors of a number.
- Identify a digit's place value.
- Demonstrate knowledge of elementary number concepts, including rounding, ordering of decimals, pattern identification, primes, and greatest common factor.
- Write powers of 10 using exponents.
- Comprehend the concept of length on the number line, and find the distance between two points.
- Understand absolute value in terms of distance.
- Find the distance between two points with the same x -coordinate or y -coordinate in the coordinate plane.
- Add, subtract, and multiply matrices (tables of numbers).
- Order fractions.
- Find and use the least common multiple.
- Demonstrate knowledge of complex numbers and multiply two complex numbers.

- Comprehend the concept of irrational numbers, such as π .
- Apply properties of rational exponents.
- Use relations involving addition, subtraction, and scalar multiplication of vectors and matrices.
- Analyze and draw conclusions based on number concepts.

Algebra and Functions

The mathematics test contains questions that require knowledge of and skills in algebra, functions, or both. *Algebra* involves formulas and equations in which letters and other symbols are used to represent unknown or unspecified values. A *function* is a rule, equation, or expression that produces exactly one output for any given input; for example, $2x$ is a function in that any input used for x results in an output that is twice the input's value.

Algebra

Algebra knowledge and skills tested include the following:

- Demonstrate knowledge of basic expressions, such as $b + g$ to identify a total.
- Solve equations in the form $x + a = b$, where a and b are whole numbers or decimals.
- Use substitution to evaluate mathematical expressions.
- Combine like terms, such as $2x + 5x$.
- Add and subtract algebraic expressions.
- Multiply two binomials.
- Match inequalities with their graphs on the number line.
- Demonstrate knowledge of slope.
- Solve real-world problems by using first-degree equations.
- Solve inequalities.
- Match linear or compound inequalities with their graphs on the number line.
- Add, subtract, and multiply polynomials.
- Solve quadratic equations.
- Factor quadratics.
- Work with squares/square roots and cubes/cube roots of numbers.
- Work with scientific notation.

- Solve problems involving positive integer exponents.
- Determine the slope of a line from an equation.
- Solve linear inequalities when the method involves reversing the inequality sign.
- Solve systems of two linear equations.
- Solve absolute value equations and inequalities.
- Match quadratic inequalities with their graphs on the number line.

Functions

Questions that involve functions test your ability to do the following:

- Understand the concept of a function having a well-defined output value at each valid input value.
- Extend a given pattern by a few terms for patterns that have a constant increase or decrease between terms or that have a constant factor between terms.
- Evaluate linear, quadratic, and polynomial functions expressed in function notation at the integer level.
- Interpret statements that use function notation in terms of their context.
- Find the domain of polynomial functions and rational functions.
- Find the range of polynomial functions.
- Find where a rational function's graph has a vertical asymptote.
- Use function notation for simple functions of two variables.
- Relate a graph to a situation described qualitatively in terms of faster change or slower change.
- Build functions for relations that are inversely proportional or exponential.
- Find a recursive expression for the general term in a sequence described recursively.
- Evaluate composite functions of integer values.
- Compare actual values and the values of a modeling function to judge model fit and compare models.
- Demonstrate knowledge of geometric sequences.
- Demonstrate knowledge of unit circle trigonometry.
- Match graphs of basic trigonometric functions with their equations.

- Use trigonometric concepts and basic identities to solve problems.
- Demonstrate knowledge of logarithms.
- Write an expression for the composite of two simple functions.

Algebra and Functions

Questions that involve both algebra and functions test your ability to do the following:

- Solve problems using whole numbers and decimals in the context of money.
- Solve one- or two-step arithmetic problems using positive rational numbers, such as percent.
- Relate a graph to a situation described quantitatively.
- Solve two- or three-step arithmetic problems involving concepts such as rate and proportion, sales tax, percentage off, and estimation.
- Perform word-to-symbol translations.
- Solve multistep arithmetic problems that involve planning or converting units of measure (for example, feet per second to miles per hour).
- Build functions and write expressions, equations, or inequalities with a single variable for common pre-algebra settings, such as rate and distance problems and problems that involve proportions.
- Match linear equations with their graphs in the coordinate plane.
- Solve word problems containing several rates, proportions, or percentages.
- Build functions and write expressions, equations, and inequalities for common algebra settings.
- Interpret and use information from graphs in the coordinate plane.
- Solve complex math problems involving percent of increase or decrease or requiring integration of several concepts.
- Build functions and write expressions, equations, and inequalities when the process requires planning and/or strategic manipulation.
- Analyze and draw conclusions based on properties of algebra and/or functions.
- Analyze and draw conclusions based on information from graphs in the coordinate plane.
- Identify characteristics of graphs based on a set of conditions or on a general equation such as $y = ax^2 + c$.

- Given an equation or function, find an equation or function whose graph is a translation by specified amounts up or down.

Geometry

Geometry questions are based primarily on the mathematical properties and relationships of points, lines, angles, two-dimensional shapes, and three-dimensional objects. Knowledge and skills tested include the following:

- Estimate the length of a line segment based on other lengths in a geometric figure.
- Calculate the length of a line segment based on the lengths of other line segments that go in the same direction (for example, overlapping line segments and parallel sides of polygons with only right angles).
- Perform common conversions of money and of length, weight, mass, and time within a measurement system (for example, inches to feet and hours to minutes).
- Compute the area and perimeter of triangles, rectangles, and other polygons.
- Use properties of parallel lines to find the measure of an angle.
- Exhibit knowledge of basic angle properties and special sums of angle measures (for example, 90° , 180° , and 360°).
- Use geometric formulas when all necessary information is given.
- Locate points in the coordinate plane.
- Translate points up, down, left, and right in the coordinate plane.
- Use several angle properties to find an unknown angle measure.
- Count the number of lines of symmetry of a geometric figure.
- Use symmetry of isosceles triangles to find unknown side lengths or angle measures.
- Recognize that real-world measurements are typically imprecise and that an appropriate level of precision is related to the measuring device and procedure.
- Compute the perimeter of composite geometric figures with unknown side lengths.
- Compute the area and circumference of circles.
- Given the length of two sides of a right triangle, find the length of the third side.
- Express the sine, cosine, and tangent of an angle in a right triangle as a ratio of given side lengths.
- Determine the slope of a line from points or a graph.
- Find the midpoint of a line segment.

- Find the coordinates of a point rotated 180° around a given center point.
- Use relationships involving area, perimeter, and volume of geometric figures to compute another measure (for example, surface area for a cube of a given volume and simple geometric probability).
- Use the Pythagorean theorem.
- Apply properties of 30° – 60° – 90° , 45° – 45° – 90° , similar, and congruent triangles.
- Apply basic trigonometric ratios to solve right-triangle problems.
- Use the distance formula.
- Use properties of parallel and perpendicular lines to determine an equation of a line or coordinates of a point.
- Find the coordinates of a point reflected across a vertical or horizontal line or across $y = x$.
- Find the coordinates of a point rotated 90° across a vertical.
- Recognize special characteristics of parabolas and circles (for example, the vertex of a parabola and the center or radius of a circle).
- Use relationships among angles, arcs, and distances in a circle.
- Compute the area of composite geometric figures when planning and/or visualization is required.
- Use scale factors to determine the magnitude of a size change.
- Analyze and draw conclusions based on a set of conditions.
- Solve multistep geometry problems that involve integrating concepts, planning, and/or visualization.

Statistics and Probability

Statistics is a branch of mathematics that involves the collection and analysis of large quantities of numerical data. *Probability* is a branch of mathematics that involves calculating the likelihood of an event occurring or a condition existing. Statistics and Probability questions test your ability to do the following:

- Calculate averages.
- Read and extract relevant data from a basic table or chart and use the data in a computation.
- Use the relationship between the probability of an event and the probability of its complement.

- Calculate the missing data value given the average and all other data values.
- Translate from one representation of data to another (for example, from a bar graph to a circle graph).
- Compute probabilities.
- Describe events as combinations of other events (for example, using *and*, *or*, and *not*).
- Demonstrate knowledge of and apply counting techniques.
- Calculate the average given the frequency counts of all the data values.
- Manipulate data from tables and charts.
- Use Venn diagrams in counting.
- Recognize that when data summaries are reported in the real world, results are often rounded and must be interpreted as having appropriate precision.
- Recognize that when a statistical model is used, model values typically differ from actual values.
- Calculate or use a weighted average.
- Interpret and use information from tables and charts, including two-way frequency tables.
- Recognize the concepts of conditional and joint probability and of independence expressed in real-world contexts.
- Distinguish among mean, median, and mode for a list of numbers.
- Analyze and draw conclusions based on information from tables and charts, including two-way frequency tables.
- Understand the role of randomization in surveys, experiments, and observational studies.
- Demonstrate knowledge of conditional and joint probability.
- Recognize that part of the power of statistical modeling comes from looking at regularity in the differences between actual values and model values.

Integrating Essential Skills

Students learn some of the most useful mathematics before grade 8: rates and percentages; proportional relationships; area, surface area, and volume; average and median; expressing numbers in different ways; using expressions to represent quantities and equations to capture relationships; and other topics. Each year, students should grow in what they can accomplish using learning from prior years. Students should be able to solve problems of increasing complexity, combine skills in longer chains of steps, apply skills in more varied contexts, understand more connections, and increase fluency. In order to assess whether students have

had appropriate growth, questions in this reporting category are at a cognitive level of at least depth of knowledge level 2 for high school students, with a significant portion at depth of knowledge level 3.

Modeling

Modeling uses mathematics to represent with a model an analysis of an actual, empirical situation. Models often help us predict or understand the actual. However, sometimes knowledge of the actual helps us understand the model, such as when addition is introduced to students as a model of combining two groups. The Modeling reporting category represents all questions that involve producing, interpreting, understanding, evaluating, and improving models. Each modeling question is also counted in the other appropriate reporting categories previously identified. Thus, the Modeling reporting category is an overall measure of how well a student uses modeling skills across mathematical topics.

Reading Test

40 questions, 35 minutes

The reading test measures your reading comprehension in three general areas:

- Key Ideas and Details
- Craft and Structure
- Integration of Knowledge and Ideas

The test comprises four sections, each containing one long or two shorter prose passages that are representative of the level and kinds of text commonly encountered in first-year college curricula. Passages on topics in social studies, natural science, literary narrative (including prose fiction), and the humanities are included, and the passages vary in terms of how challenging and complex they are.

Four scores are reported for the ACT reading test: a total test score based on all 40 questions and three reporting category scores based on specific knowledge and skills.

Key Ideas and Details

Questions that test reading comprehension focus primarily on identifying key details in the passage and grasping the overall meaning of the passage. Reading skills tested are divided into three categories:

- Close reading
- Central ideas, themes, and summaries
- Relationships

Close Reading

Close-reading skills involve your ability to do the following:

- Locate and interpret facts or details in a passage.
- Draw logical conclusions.
- Paraphrase statements.

Central Ideas, Themes, and Summaries

Questions that focus on central ideas, themes, and summaries challenge your ability to do the following:

- Identify the topic and distinguish it from the central idea or theme.
- Identify or infer the central idea or theme of a passage.
- Summarize key supporting ideas or details.

Relationships

Relationship questions involve the ability to do the following:

- Identify the sequence of events or place events in their correct sequence.
- Identify stated or implied cause-effect relationships.
- Identify stated or implied comparative relationships.

Craft and Structure

Some reading questions go beyond the meaning of the passage to challenge your understanding of how the author crafted and structured the passage. Reading skills tested in this area are divided into three categories:

- Word meanings and word choice
- Text structure
- Purpose and point of view

Word Meanings and Word Choice

Reading questions may focus on the meaning or impact of a word or phrase, challenging your ability to do the following:

- Interpret the meaning of a word or phrase, including determining technical, academic, connotative, and figurative meanings.
- Understand the implication of a word or phrase and of descriptive language.
- Analyze how the choice of a specific word or phrase shapes the meaning or tone of a passage.

Text Structure

Text-structure questions ask you to analyze how various structural elements function to serve a specific purpose in the passage. To answer such questions, you may need to do one of the following:

- Analyze how one or more sentences in passages relate to the whole passage.
- Identify or infer the function of one or more paragraphs.
- Analyze the overall structure of a passage.

Purpose and Point of View

The reading test may include questions that challenge your ability to do the following:

- Identify or infer the author's or narrator's purpose or intent.
- Determine how an author's or narrator's purpose or intent shapes the content and style of the passage.
- Recognize an author's or narrator's point of view.

Integration of Knowledge and Ideas

Reading questions may require that you go beyond simply reading and understanding a passage to analyzing one or more passages. Reading skills tested in the area of Integration of Knowledge and Ideas are divided into two categories:

- Arguments
- Multiple texts

Arguments

Questions related to argumentative essays may test your ability to do the following:

- Identify or infer the central claim being presented in the passage.
- Analyze how one or more sentences offer reasons for or support the claim.

Multiple Texts

Multiple-text questions involve reading two passages and doing the following:

- Compare the two passages.
- Draw logical conclusions using information from the two passages.

Science Test

40 questions, 35 minutes

The science test measures the interpretation, analysis, evaluation, reasoning, and problem-solving skills required in the natural sciences: life science/biology; physical science/chemistry, physics; and earth and space science. (See chapter 12 for a more detailed breakdown of science content covered on the test.)

The test assumes that students are in the process of taking the core science course of study (three years or more) that will prepare them for college-level work and have completed a course in earth science and/or physical science and a course in biology. The test presents several sets of scientific information, each followed by a number of multiple-choice test questions. The scientific information is conveyed in the form of reading passages and graphic representations—graphs (charts), tables, and illustrations.

Four scores are reported for the ACT science test: a total test score based on all 40 questions and three reporting category scores based on scientific knowledge, skills, and practices. The reporting categories are:

- Interpretation of Data
- Scientific Investigation
- Evaluation of Models, Inferences, and Experimental Results

Interpretation of Data

Interpretation of Data involves the following skills:

- Select data from a data presentation (for example, a food web diagram, a graph, a table, or a phase diagram).
- Identify features of a table, graph, or diagram (for example, units of measurement).
- Find information in text that describes a data presentation.
- Understand scientific terminology.
- Determine how the values of variables change as the value of another variable changes in a data presentation.
- Compare or combine data from one or more data presentations (for example, order or sum data from a table).
- Translate information into a table, graph, or diagram.
- Perform a interpolation or extrapolation using data in a table or graph (for example, categorize data from a table using a scale from another table).
- Determine and/or use a mathematical relationship that exists between data.
- Analyze presented information when given new information.

Scientific Investigation

Questions that apply to scientific investigation are typically related to experiments and other research. Such questions challenge your ability to do the following:

- Find information in text that describes an experiment.
- Understand the tools and functions of tools used in an experiment.
- Understand the methods used in an experiment.
- Understand experimental design.
- Identify a control in an experiment.
- Identify similarities and differences between experiments.
- Determine which experiments use a given tool, method, or aspect of design.
- Predict the results of an additional trial or measurement in an experiment.
- Determine the experimental conditions that would produce specified results.
- Determine the hypothesis for an experiment.
- Determine an alternate method for testing a hypothesis.
- Understand precision and accuracy issues.
- Predict the effects of modifying the design or methods of an experiment.
- Determine which additional trial or experiment could be performed to enhance or evaluate experimental results.

Evaluation of Models, Inferences, and Experimental Results

Some questions on the science test challenge your ability to evaluate models, inferences, and experimental results. (A *model* is a description of an object or phenomenon intended to explain and predict its behavior.) To answer such questions, you must be able to do the following:

- Find basic information in a model.
- Identify implications in a model.
- Determine which models present certain information.
- Determine which hypothesis, prediction, or conclusion is, or is not, consistent with one or more data presentations, models, or pieces of information in text.
- Identify key assumptions in a model.
- Identify similarities and differences between models.

- Determine whether presented information or new information supports or contradicts (or weakens) a hypothesis or conclusion and why.
- Identify the strengths and weaknesses of models.
- Determine which models are supported or weakened by new information.
- Determine which experimental results or models support or contradict a hypothesis, prediction, or conclusion.
- Use new information to make a prediction based on a model.

Writing Test (Optional)

1 prompt, 40 minutes

The writing test is a 40-minute essay test that measures your writing skills—specifically those writing skills emphasized in high school English classes and in entry-level college composition courses.

The test asks you to produce an essay in response to a contemporary issue. You will be given a prompt that presents the issue and provides three different perspectives on it. Your task is to write an essay in which you develop a perspective on the issue and explore how it relates to at least one other perspective.

Trained readers will evaluate your essay for the evidence it provides of a number of core writing skills. You will receive a total of five scores for this test: a single subject-level writing score reported on a scale of 2–12 and four domain scores based on an analytic scoring rubric. The four domain scores are

- Ideas and Analysis
- Development and Support
- Organization
- Language Use and Convention

Ideas and Analysis

Effective writing depends on effective ideas. It is important to think carefully about the issue in the prompt and compose an argument that addresses the issue meaningfully. In evaluating the ideas and analysis in your essay, readers will look for your ability to do the following:

- Generate a clear main idea that establishes your perspective on the issue.
- Engage with multiple perspectives on the issue by analyzing the relationship between your perspective and at least one other perspective.

- Clarify your understanding of the issue and differing perspectives on it by providing a relevant context for discussion.
- Analyze critical elements (e.g., implications and complexities) of the issue and perspectives under consideration.

Development and Support

Even the best ideas must be developed and supported to be effective in a written argument. By explaining and illustrating your points, you help the reader understand your thinking. In evaluating this dimension of your essay, readers will look for your ability to do the following:

- Clarify your ideas by explaining your reasoning.
- Bolster your claims with persuasive examples.
- Convey the significance of your perspective by exploring reasons why your ideas are worth considering.
- Extend your argument by considering qualifications, exceptions, counterarguments, and complicating factors.

Organization

Organizational choices are essential to effective writing. Guide the reader through your discussion by arranging your ideas according to the logic of your argument. As readers evaluate the organization of your essay, they will look for your ability to do the following:

- Unify your essay by making strategic use of a controlling idea and other organizational techniques (e.g., theme or motif).
- Group ideas clearly, with each paragraph limited to the discussion of related ideas.
- Produce a sequence of ideas that follows a clear logic, both in terms of the argument's overall structure (e.g., introduction, body, conclusion) and within the argument itself, with each point following from the last.
- Use transitions to connect ideas, both within paragraphs (e.g., relating claims to support) and across paragraphs (e.g., moving from one discussion into another).

Language Use and Convention

Skillful language use enhances argumentative writing. Strategic choices in the vocabulary you use and the style you employ can make your essay more effective. To evaluate your use of language, readers will look for your ability to do the following:

- Make precise word choices that communicate your ideas with clarity.
- Demonstrate control over a variety of sentence structures.

- Match the style of your writing to the audience and purpose (e.g., more evocative language to convey emotional appeals versus a more neutral voice to convey an argument based on reason).
- Accurately apply the conventions of grammar, word usage, syntax, and mechanics.

ACT Test Formats: Paper and Online

The ACT is available as a paper test and as an online test in certain states and educational districts. Regardless of format, what is most important is the knowledge and skills you have developed over your course of study. If you know the material, whether you choose answers by marking them on paper or clicking an option on a computer screen will likely make little difference.

Using a Calculator

You may use a permitted calculator only on the mathematics test, but you are not required to do so. All math problems on the test can be solved without a calculator, and you may be able to perform some of the math more quickly in your head or on scratch paper.

Note: You may use any four-function, scientific, or graphing calculator as long as it is a permitted calculator modified, if necessary, as described in the following. For additional details and ACT's most current calculator policy, visit www.act.org.

Certain types of calculators, including the following, are prohibited:

- Calculators with built-in or downloaded computer algebra system (CAS) functionality, including the TI-89, TI-92, TI-Nspire CAS, HP Prime, HP 48GII, HP 40G, HP 49G, HP 50G, fx-ClassPad 400, ClassPad 300, ClassPad 330, and all Casio models that start with CFX-9970G. (Using the TI-89 is the most common reason students are dismissed from the ACT for prohibited calculator use.)
- Handheld, tablet, or laptop computers, including PDAs.
- Electronic writing pads or pen-input devices (the Sharp EL 9600 is permitted).
- Calculators built into cell phones or any other electronic communication devices.
- Calculators with a typewriter keypad (letter keys in QWERTY format, but letter keys not in QWERTY format are permitted).

The following types of calculators are permitted but only after they are modified as noted:

- Calculators that can hold programs or documents (remove all documents and all programs that have CAS functionality).
- Calculators with paper tape (remove the tape).
- Calculators that make noise (mute the device).

- Calculators with an infrared data port (completely cover the infrared data port with heavy opaque material such as duct tape or electrician's tape).
- Calculators that have power cords (remove all power and electrical cords).
- Accessible calculators (such as audio-talking or braille calculators) may be allowed under the accessibility policies for the ACT test. (Visit www.act.org for details.)

If you choose to use a calculator during the mathematics test, follow these guidelines:

- Use a calculator you are accustomed to using. A more powerful, but unfamiliar, calculator may be a disadvantage. If you are unaccustomed to using a calculator, practice using it when you take the practice tests in this book, so you are comfortable with using it in a test situation.
- Do not share a calculator during the test.
- Make sure your calculator works properly. If your calculator uses batteries, the batteries should be strong enough to last throughout the testing session.
- Bring a spare calculator and/or extra batteries.

Taking the Test

Knowing what to expect on test day can alleviate any anxiety you may feel. The following list describes the steps you will take through the testing day:

1. You must report to the test center by the reporting time.
 - If you are testing on a ***national test*** date the reporting time is 8:00 AM.
 - You will need to bring the following:
 - A printed copy of your ACT admission ticket
 - Acceptable photo ID
 - Sharpened no. 2 soft-lead pencils with good erasers (no mechanical pencils or ink pens)
 - A calculator, if you would like to use one
 - If you are testing during the week day at your school through ***state and district*** testing the reporting time will be at the same time you usually report for school.
 - You will need to bring the following:
 - Acceptable photo ID

- Sharpened no. 2 soft-lead pencils with good erasers (no mechanical pencils or ink pens)
- A calculator, if you would like to use one

(**Note:** You will *not* be admitted to test if you are late or if your ID does not meet ACT's requirements.)

2. When all examinees present at the reporting time are checked in and seated, wait until you are notified to start the test.
3. A short break is scheduled after the first two tests. You are prohibited from using a cell phone or any electronic device during the break, and you may not eat or drink anything in the test room. (If you take the ACT with writing, you will have time before the writing test to relax and sharpen your pencils.)
4. When time has expired, tests are collected and you are dismissed.

Note: If you do not complete all your tests for any reason, tell a member of the testing staff whether or not you want your answer document scored before you leave the test center. If you do not, all tests attempted will be scored.

For more about registering for the ACT and being well prepared for test day, turn to chapter 13.

Summary

This book should help you to understand how to get ready to take the ACT. Knowing the basics should get you started. By now, you should have a fair idea of what to expect at the test center and know where to find more information: on ACT's website at www.act.org. Now that you know the basic information, you should be ready to start preparing for the ACT.

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