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Erfun Geula



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PART 1

Getting Started

CHAPTER 1

Introducing the GRE

CHAPTER 2

GRE Diagnostic Test

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CHAPTER 1

Introducing the GRE

Study this chapter to learn about:

- GRE scoring
- The section-adaptive nature of the exam
- Using the calculator
- Skipping questions and guessing
- The GRE test format

What Is the GRE?

The GRE (Graduate Record Examination) is a test required by most universities for admission to their MA, MS, and PhD programs. Increasingly, many business schools are accepting the exam as well. Unlike most tests that students may have taken in college or high school, the exam does not test knowledge or achievement in any specific areas. Instead, the exam is designed to assess the test-taker's fundamental Quantitative and Verbal Reasoning abilities.

Thus the Quantitative portion of the exam does not address “advanced” mathematical concepts such as calculus or advanced trigonometry. Instead, it assesses a student's conceptual understanding of the foundational mathematical topics from high school: algebra; fractions, decimals, and percents; arithmetic; word problems; and geometry. Many students interpret this information to mean that they simply need to re-memorize their rules from high school math to succeed on the Quantitative section. In fact, the Quantitative questions are concerned more with a student's ability to implement logic skills in conjunction with these topics rather than to regurgitate a certain set of rules.

You should think of the Quantitative questions as puzzles to be solved using certain mathematical principles, not as questions that can be solved by straightforward application of a few principles or formulas.

Likewise, the Verbal portion of the exam does not require preexisting content knowledge. The Reading Comprehension questions do not assume or require prior familiarity with the passage's content; instead, they are designed to measure a student's ability to efficiently digest the information in a college-level text. Text Completion and Sentence Equivalence questions, however, will require knowledge of college- and graduate-level vocabulary. For students who perform below their desired score range on the Verbal Reasoning section of the diagnostic test, learning vocabulary may be the quickest way to a score improvement.

It should be noted that even the vocabulary-based questions address verbal reasoning in the sense that they address a test-taker's ability to use the context of a sentence and logical connections among a sentence's parts to identify the word(s) that best fit in a certain context.

The GRE consists of six or seven sections: an Analytical Writing section, two scored Quantitative Reasoning sections, two scored Verbal Reasoning sections, and one unscored experimental section, which could be either Quantitative or Verbal. The computer-based version of the test is arranged as follows:

Computer-Based GRE: Test Format

SECTIONS	QUESTIONS	TIME
Analytical Writing	Issue Task Argument Task	30 minutes 30 minutes
Verbal—2 sections	20 questions per section	30 minutes per section
Quantitative—2 sections	20 questions per section	35 minutes per section
Unscored*	Varies	Varies
Research**	Varies	Varies

* The unscored section will contain an experimental Verbal or Quantitative section.

** You may not encounter a Research section but if you do, it will be at the end of the exam.

The paper-based version of the GRE involves slightly different time limits and numbers of questions. It does not include a Research section.

GRE Scoring

For your performance on the Quantitative and Verbal sections, you will receive *raw* scores, which are calculated based on the questions you answered correctly in each section and the level of difficulty of these questions. These raw scores are then converted to scaled scores ranging from 130 to 170, going up in 1-point increments. *The conversion from the raw score to the scaled score depends on:*

- the number of questions answered correctly for a given section
- the assigned level of difficulty of all correct and incorrect questions (each question is assigned a level of difficulty ranging from 1 to 5).

Each of the two essays that you write in the Analytical Writing section is scored on a scale of 0 to 6. Your score for the Analytical Writing section will be the average of these two scores. For details, see the simplified Analytical Writing scoring rubrics on pages 53–54.

Perhaps surprisingly, a larger proportion of test-takers perform well on the Quantitative Reasoning section than on the Verbal Reasoning section. For example, according to reports published by ETS, a score of 160 on the Verbal section corresponds to the 83rd percentile, while the same score on the Quantitative section corresponds to the 81st percentile.

What Is a Section-Adaptive Exam?

In June 2011 the makers of the GRE began administering the *Revised GRE*, which substantially changed the structure and format of the exam. One of the primary changes to the exam was the switch from a *computer-adaptive* test to a *section-adaptive* test. In a computer-adaptive test, the level of difficulty of each new question is based on a student's performance on all previous questions. On a section-adaptive test, on the other hand, the content and level of difficulty of a given question is not determined by a student's performance on all previous questions. Instead, the content and difficulty of a given *section* is determined by the student's performance on a previous section. For example, test-takers can expect that their first Quantitative section will feature questions that are mostly categorized as *medium*. Based on the test-taker's performance on this first section, the next Quantitative section will have questions that are mostly *easy*, *medium*, or *difficult*. The scoring algorithm will then use data from both sections to determine a student's Quantitative or Verbal score.

One consequence of this system is that a student's score will often have a ceiling if he or she has trouble on the first Quantitative or Verbal section. Essentially, if the second section is not categorized as "difficult," then no matter how well a student performs on that second section, it is unlikely that the student will achieve a score in the upper percentiles of that measure.

While you are taking the GRE, don't try to guess how you're doing. Many students are tempted to use the perceived level of difficulty of their questions to estimate their performance on the test. This is a perilous strategy for three reasons:

1. The questions within even the most difficult section will consist of a range of levels of difficulty.

2. Often, a question that might appear difficult or easy to you might not be categorized in the same way for all test-takers.
 3. Prematurely assessing your performance on the test will distract you from your primary goal on the exam: to get as many questions correct as possible!
-

Using the Calculator

You'll be happy to know that you will be provided with an on-screen calculator for the Quantitative sections. The calculator features addition, subtraction, multiplication, division, and square roots. Though this certainly eliminates the need to memorize many of the common powers and roots, you should avoid deferring to the calculator for *all* calculations. Many calculations require the use of simple mental math that you do every day. If you do not feel confident with this math or are confronted with what seems to be a complex calculation, then you should use the calculator.

Skipping Questions and Guessing

The revised GRE computer format offers certain functions that work in favor of the test-taker. At the upper right of your test screen, there will be an option to “mark” a question. Test-takers can mark up to three questions per section. So if you think you can get a question correct by spending additional time on it, just mark that question and come back to it. Unlike other standardized tests you may have taken, the GRE does not penalize students for incorrect answers. Thus you should guess and mark any questions that you're unsure of or that you feel will take too long to answer.

The GRE Test Format

Verbal Reasoning Ability

Each of the two scored Verbal sections contains 20 questions. These questions fall into three categories:

- 6 Text Completion questions
- 5 Sentence Equivalence questions
- 9 Reading Comprehension questions

Most test-takers erroneously assume that these question types test strictly your vocabulary knowledge. Though it's certainly true that a large vocabulary is helpful for these questions, you need to be equally concerned about the use of concrete textual evidence to justify your answers.

Text Completion Questions

Text Completion questions are verbal questions designed to test your vocabulary and your ability to use the context of a sentence to infer the appropriate word choice. Text Completion questions consist of a one-to-five-sentence passage with one to three blanks. You are asked to use logic and the context of the sentence to identify the best word for each blank. There is no partial credit for Text Completion questions. For Text Completion questions with one blank, there will be five choices. For Text Completion questions with two to three blanks, there will be three choices for each blank. Here is an example of a Text Completion question:

Nagel’s tendency to question (i) _____ philosophical views has long drawn admiration from his peers. But ironically enough, this very rebelliousness has accounted for the (ii) _____ his new book.

Blank (i)	Blank (ii)
(A) thoughtful	(D) antipathy toward
(B) provocative	(E) embrace of
(C) orthodox	(F) curiosity over

SOLUTION: The clue “this very rebelliousness” indicates that the word in the first blank should match the definition of “accepted.” The best choice for Blank (i) is therefore **orthodox**. The phrase “But ironically enough . . .” tells you that the reception toward Nagel’s new book is the opposite of “admiration.” The best choice for Blank (ii) is therefore **antipathy toward**. The correct answer is C and D.

Sentence Equivalence Questions

Sentence Equivalence questions are also designed to test your vocabulary and your ability to use the context of a sentence to infer the appropriate word choice. Sentence Equivalence questions consist of a one-sentence passage with one blank. You are given six choices and will be asked to use logic and the context of the sentence to identify *two* words that best fit in the blank. There is no partial credit for Sentence Equivalence questions. In contrast to Text Completion questions, Sentence Equivalence questions are generally more dependent on vocabulary. In addition, Sentence Equivalence questions are more amenable to strategy: almost always, the two correct answers will be synonyms (this is discussed in the Text Completion and Sentence Equivalence review chapters). The following is an example of a Sentence Equivalence question:

After Harold had endured weeks of his neighbors' blaring music, his well-known _____ finally gave way to frustration.

- A imperturbability
- B indigence
- C aestheticism
- D equanimity
- E diligence
- F virulence

SOLUTION: The phrase “finally gave way” indicates that Howard’s “frustration” contrasts with his usual behavior. You should be looking for choices whose meaning is the opposite of being frustrated. The correct answer is A and D.

Reading Comprehension Questions

In Reading Comprehension questions, you are given a passage that is from one to five paragraphs in length and you are asked questions about the content of the passage, the inferences that can be drawn from the passage, and ways to strengthen or weaken claims in the passage. The following is a typical Reading Comprehension passage followed by a typical question:

When Tocqueville came to America in 1831, he expressed a sentiment that is echoed in the works of Bloom and Kennedy: that American democracy, by encouraging dissent, can lead to its own undoing. But in contrast to the pessimism that dominates Bloom’s and Kennedy’s thinking, Tocqueville’s analysis went a step further. While acknowledging the seeming inevitability of dissent among the citizenry, he also recognized that beneath this frustration there lay a fundamental belief that democratic politics would ultimately amend the situations that aroused complaint. As Tocqueville noted, at any given point in time, democracy can appear chaotic, shallow, and contradictory. But, he noted, it was never stagnant. For Tocqueville, democracy’s tendency to encourage and accommodate discontent was its greatest virtue. Because it is self-correcting, a properly run democratic system would ultimately benefit from any discontent because the system is designed to ultimately rectify the problem.

The author mentions Tocqueville’s belief that democracy “was never stagnant” to

- (A) highlight Tocqueville’s belief in the self-correcting nature of democracy
- (B) introduce a difference between Tocqueville’s thinking and that of Bloom and Kennedy
- (C) explain why Tocqueville believes citizens of democratic nations are often unhappy
- (D) suggest ways to eliminate the frustration of the citizens of democratic nations
- (E) imply that many of the concerns of democratic citizens are baseless

SOLUTION: The author provides this statement to support the larger point that democracies can withstand turmoil because they are designed to correct themselves. The correct answer is A.

Quantitative Reasoning Ability

Each of the two scored Quantitative sections contains 20 questions. These questions fall into three categories:

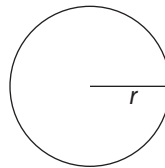
- 8 Quantitative Comparison questions
- 9 Discrete Quantitative questions
- 3 Data Interpretation questions

Quantitative Comparison Questions

In Quantitative Comparison questions, you will see two columns and will be asked to determine which column has a greater value. Here is an example:

Each of the following questions consists of two quantities, Quantity A and Quantity B. You are to compare the two quantities. You may use additional information centered above the two quantities if additional information is given. Choose:

- (A) if Quantity A is greater
- (B) if Quantity B is greater
- (C) if the two quantities are equal
- (D) if the relationship between the two quantities cannot be determined



A circle has radius r

QUANTITY A

The area of the circle

QUANTITY B

The circumference
of the circle

- (A) (B) (C) (D)

SOLUTION: The area of the circle can be represented as πr^2 . The circumference of the circle can be represented as $2\pi r$. If the radius is 1, then Quantity B is greater. If the radius is 10, then Quantity A is greater. Thus, given the information, you cannot determine which quantity has a greater value. The correct answer is Choice D.