Quantitative Reasoning Section

The Quantitative Reasoning measure of the GRE revised General Test assesses your:

- Basic mathematical skills
- Understanding of elementary mathematical concepts
- Ability to reason quantitatively and to model and solve problems with quantitative methods

Quantitative Reasoning Question Types

1. Quantitative Comparison questions
2. Multiple-choice questions—Select One Answer Choice
3. Multiple-choice questions—Select One or More Answer Choices
4. Numeric Entry questions

Each question appears either independently as a discrete question or as part of a set of questions called a Data Interpretation set. All of the questions in a Data Interpretation set are based on the same data presented in tables, graphs, or other displays of data. In the computer-based test, you are allowed to use a basic calculator provided on-screen on the Quantitative Reasoning measure.

1. Quantitative Comparison Questions

Questions of this type ask you to compare two quantities—Quantity A and Quantity B—and then determine which of the following statements describes the comparison.

A. Quantity A is greater.
B. Quantity B is greater.
C. The two quantities are equal.
D. The relationship cannot be determined from the information given.

2. Multiple-choice Questions—Select One Answer Choice

These questions are multiple-choice questions that ask you to select only one answer choice from a list of five choices.

3. Multiple-choice Questions – Select one or more Answer choices

These questions are multiple-choice questions that ask you to select one or more answer choices from a list of choices. A question may or may not specify the number of choices to select. These questions are marked with square boxes beside the answer choices, not circles or ovals.

4. Numeric Entry Questions

Questions of this type ask you either to enter your answer as an integer or a decimal in a single answer box or to enter it as a fraction in two separate boxes—one for the numerator and one for the denominator.
In the computer-based test, use the computer mouse and keyboard to enter your answer.

Test Your Quantitative Skills

Sample quantitative comparison question:

Direction:
Compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given, and select one of the following four answer choices:

A. Quantity A is greater.
B. Quantity B is greater.
C. The two quantities are equal.
D. The relationship cannot be determined from the information given

A symbol that appears more than once in a question has the same meaning throughout the question.

Quantity A	**Quantity B**
The least prime number greater than 24	Greatest prime number less than 28

A. Quantity A is greater.
B. Quantity B is greater.
C. The two quantities are equal.
D. The relationship cannot be determined from the information given.

Answer: A) Quantity A is greater.

Sample Multiple-choice questions—Select One Answer Choice question

Direction:
Select a single answer choice:

1) If $5x + 32 = 4 - 2x$, what is the value of x?

A. −4
B. −3
C. 4
D. 7
E. 12

Answer: A) -4

Sample Multiple-choice questions—Select one or more Answer Choice question

Direction:
Select one or more answer choices according to the specific question directions.
If the question does not specify how many answer choices to select, select all that apply.

- The correct answer may be just one of the choices or as many as all of the choices, depending on the question.
- No credit is given unless you select all of the correct choices and no others.

If the question specifies how many answer choices to select, select exactly that number of choices.

1) Which of the following integers are multiples of both 2 and 3? Indicate all such integers.

A. 8
B. 9
C. 12
D. 18
E. 21
F. 36
Answer: C, D, F

Sample Numeric Entry Question

1) One pen costs $0.25 and one marker costs $0.35. At those prices, what is the total cost of 18 pens and 100 markers?

Answer: $39.50

VERBAL SECTION:

The Verbal Reasoning measure contains three types of questions:

1. Reading Comprehension
2. Text Completion
3. Sentence Equivalence

READING COMPREHENSION

Reading Comprehension questions are designed to test a wide range of abilities required to read and understand the kinds of prose commonly encountered in graduate school.

SAMPLE READING COMPREHENSION:

Reviving the practice of using elements of popular music in classical composition, an approach that had been in hibernation in the United States during the 1960s, composer Philip Glass (born 1937) embraced the ethos of popular music in his compositions. Glass based two symphonies on music by rock musicians David Bowie and Brian Eno, but the symphonies' sound is distinctively his. Popular elements do not appear out of place in Glass's classical music, which from its early days has shared certain harmonies and rhythms with rock music. Yet this use of popular elements has not made Glass a composer of popular music. His music is not a version of popular music packaged to attract classical listeners; it is high art for listeners steeped in rock rather than the classics.

Select only one answer choice.

1. The passage addresses which of the following issues related to Glass's use of popular elements in his classical compositions?

A. How it is regarded by listeners who prefer rock to the classics
B. How it has affected the commercial success of Glass's music
C. Whether it has contributed to a revival of interest among other composers in using popular elements in their compositions
D. Whether it has had a detrimental effect on Glass's reputation as a composer of classical music
E. Whether it has caused certain of Glass's works to be derivative in quality

Consider each of the three choices separately and select all that apply.

2. The passage suggests that Glass's work displays which of the following qualities?

A. A return to the use of popular music in classical compositions
B. An attempt to elevate rock music to an artistic status more closely approximating that of classical music
C. A long-standing tendency to incorporate elements from two apparently disparate musical styles

3. Select the sentence that distinguishes two ways of integrating rock and classical music.

Text Completion

Question Structure

- Passage composed of one to five sentences
- One to three blanks
- Three answer choices per blank (five answer choices in the case of a single blank)
- The answer choices for different blanks function independently; that is, selecting one answer choice for one blank does not affect what answer choices you can select for another blank
- Single correct answer, consisting of one choice for each blank; no credit for partially correct answers

SAMPLE TEXT COMPLETION QUESTION

Direction: For each blank select one entry from the corresponding column of choices. Fill all blanks in the way that best completes the text.

1. In parts of the Arctic, the land grades into the land fast ice so _____ that you can walk off the coast and not know you are over the hidden sea.

A. Permanently
B. Imperceptibly
C. Irregularly
D. Precariously
E. Relentlessly

The correct answer is imperceptibly (Choice B).

2. Vain and prone to violence, Caravaggio could not handle success: the more his (i) _____ as an artist increased, the more (ii)_____ his life became.

Blank (i)

A. Temperance
B. Notoriety
C. Eminence

Blank (ii)

D. Tumultuous
E. Providential
F. Dispassionate

The correct answer is eminence (Choice C) and tumultuous (Choice D).

3. No other contemporary poet's work has such a well-earned reputation for (i)_____, and there are few whose moral vision is so imperiously unsparing. Of late, however, the almost belligerent demands of his severe and densely forbidding poetry has taken an improbable turn. This new collection is the poet's fourth book in six years — an ample output even for poets of sunny disposition, let alone for one of such (ii)_____ over the previous 50 years. Yet for all his new found (iii)_____, his poetry is as thorny as ever.

Blank (i)	**Blank (ii)**	**Blank (iii)**
A. Patent accessibility	D. Penitential austerity	G. Taciturnity
B. Intrinsic frivolity	E. Intractable prolixity	H. Volubility
C. Near impenetrability	F. Impetuous prodigality	I. Pellucidity

Answer: Choice C: near impenetrability; Choice D: penitential austerity; Choice H: volubility

Sentence Equivalence

Question Structure

Consists of:

- A single sentence
- One blank
- Six answer choices
- Requires you to select two of the answer choices; no credit for partially correct answers.

These questions are marked with square boxes beside the answer choices, not circles or ovals

Sample sentence equivalence question:

Direction: Select the <u>two</u> answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce complete sentences that are alike in meaning.

1. Dominant interests often benefit most from _____ of governmental interference in business, since they are able to take care of themselves if left alone.

A. Intensification
B. Authorization
C. Centralization
D. Improvisation
E. Elimination

Answer: Choice (E) - Elimination

Analytical Writing Section :

The Analytical Writing measure assesses your critical thinking and analytical writing skills. It assesses your ability to articulate and support complex ideas, construct and evaluate arguments, and sustain a focused and coherent discussion. It does not assess specific content knowledge.

The Analytical Writing measure consists of two separately timed analytical writing tasks:

1. a 30-minute “Analyze an Issue” task
2. a 30-minute “Analyze an Argument” task

The Issue task presents an opinion on an issue of broad interest followed by specific instructions on how to respond to that issue. You are required to evaluate the issue, considering its complexities, and develop an argument with reasons and examples to support your views.

The Argument task presents a different challenge from that of the Issue task: it requires you to evaluate a given argument according to specific instructions. You will need to consider the logical soundness of the argument rather than to agree or disagree with the position it presents.

SAMPLE ISSUE TASK :

As people rely more and more on technology to solve problems, the ability of humans to think for themselves will surely deteriorate.
Discuss the extent to which you agree or disagree with the statement and explain your reasoning for the position you take. In developing and supporting your position, you should consider ways in which the statement might or might not hold true and explain how these considerations shape your position.

Answer:

The following is an actual AWA essay that received the highest rating

The statement linking technology negatively with free thinking plays on recent human experience over the past century. Surely there has been no time in history where the lived lives of people have changed more dramatically. A quick reflection on a typical day reveals how technology has revolutionized the world. Most people commute to work in an automobile that runs on an internal combustion engine. During the workday, chances are high that the employee will interact with a computer that processes information on silicon bridges that are .09 microns wide. Upon leaving home, family members will be reached through wireless networks that utilize satellites orbiting the earth. Each of these common occurrences would have been inconceivable at the turn of the 19th century.

The statement attempts to bridge these dramatic changes to a reduction in the ability for humans to think for themselves. The assumption is that an increased reliance on technology negates the need for people to think creatively to solve previous quandaries. Looking back at the introduction, one could argue that without a car, computer, or mobile phone, the hypothetical worker would need to find alternate methods of transport, information processing, and communication. Technology short circuits this thinking by making the problems obsolete.

However, this reliance on technology does not necessarily preclude the creativity that marks the human species. The prior examples reveal that technology allows for convenience. The car, computer, and phone all release additional time for people to live more efficiently. This efficiency does not preclude the need for humans to think for themselves. In fact, technology frees humanity to not only tackle new problems, but may itself create new issues that did not exist without technology. For example, the proliferation of automobiles has introduced a need for fuel conservation on a global scale. With increasing energy demands from emerging markets, global warming becomes a concern inconceivable to the horse-and-buggy generation. Likewise dependence on oil has created nation-states that are not dependent on taxation, allowing ruling parties to oppress minority

groups such as women. Solutions to these complex problems require the unfettered imaginations of maverick scientists and politicians.

In contrast to the statement, we can even see how technology frees the human imagination. Consider how the digital revolution and the advent of the internet has allowed for an unprecedented exchange of ideas. WebMD, a popular internet portal for medical information, permits patients to self research symptoms for a more informed doctor visit. This exercise opens pathways of thinking that were previously closed off to the medical layman. With increased interdisciplinary interactions, inspiration can arrive from the most surprising corners. Jeffrey Sachs, one of the architects of the UN Millenium Development Goals, based his ideas on emergency care triage techniques. The unlikely marriage of economics and medicine has healed tense, hyperinflation environments from South America to Eastern Europe.

This last example provides the most hope in how technology actually provides hope to the future of humanity. By increasing our reliance on technology, impossible goals can now be achieved. Consider how the late 20th century witnessed the complete elimination of smallpox. This disease had ravaged the human race since prehistoric days, and yet with the technology of vaccines, free thinking humans dared to imagine a world free of smallpox. Using technology, battle plans were drawn out, and smallpox was systematically targeted and eradicated.

Technology will always mark the human experience, from the discovery of fire to the implementation of nanotechnology. Given the history of the human race, there will be no limit to the number of problems, both new and old, for us to tackle. There is no need to retreat to a Luddite attitude to new things, but rather embrace a hopeful posture to the possibilities that technology provides for new avenues of human imagination.

Sample Argument Task :

In surveys Mason City residents rank water sports (swimming, boating, and fishing) among their favorite recreational activities. The Mason River flowing through the city is rarely used for these pursuits, however, and the city park department devotes little of its budget to maintaining riverside recreational facilities. For years there have been complaints from residents about the quality of the river's water and the river's smell. In response, the state has recently announced plans to clean up Mason River. Use of the river for water sports is, therefore, sure to increase. The city government should for that reason devote more money in this year's budget to riverside recreational facilities.
Write a response in which you examine the stated and/or unstated assumptions of the argument. Be sure to explain how the argument depends on the assumptions and what the implications are if the assumptions prove unwarranted.

Answer :

The following is an actual AWA essay that received the highest rating

While it may be true that the Mason City government ought to devote more money to riverside recreational facilities, this author's argument does not make a cogent case for increased resources based on river use. It is easy to understand why city residents would want a cleaner river, but this argument is rife with holes and assumptions, and thus, not strong enough to lead to increased funding.

Citing surveys of city residents, the author reports city resident's love of water sports. It is not clear, however, the scope and validity of that survey. For example, the survey could have asked residents if they prefer using the river for water sports or would like to see a hydroelectric dam built, which may have swayed residents toward river sports. The sample may not have been representative of city residents, asking only those residents who live upon the river. The survey may have been 10 pages long, with 2 questions dedicated to river sports. We just do not know. Unless the survey is fully representative, valid, and reliable, it can not be used to effectively back the author's argument.

Additionally, the author implies that residents do not use the river for swimming, boating, and fishing, despite their professed interest, because the water is polluted and smelly. While a polluted, smelly river would likely cut down on river sports, a concrete connection between the resident's lack of river use and the river's current state is not effectively made. Though there have been complaints, we do not know if there have been numerous complaints from a wide range of people, or perhaps from one or two individuals who made numerous complaints. To strengthen his/her argument, the author would benefit from implementing a normed survey asking a wide range of residents why they do not currently use the river.

Building upon the implication that residents do not use the river due to the quality of the river's water and the smell, the author suggests that a river clean up will result in increased river usage. If the river's water quality and smell result from problems which can be cleaned, this may be true. For example, if the decreased water quality and aroma is caused by pollution by factories along the river, this conceivably could be remedied. But if the quality and aroma results from the natural mineral deposits in the water or surrounding rock, this may not be true. There are some bodies of water which emit a strong smell of sulphur due to the geography of the area. This is not something likely to be affected by a clean-up. Consequently, a river clean up may have no impact upon river usage. Regardless of whether the river's quality is able to be improved or not, the author does not effectively show a connection between water quality and river usage.

A clean, beautiful, safe river often adds to a city's property values, leads to increased tourism and revenue from those who come to take advantage of the river, and a better overall quality of life for residents. For these reasons, city government may decide to invest in improving riverside recreational facilities. However, this author's argument is not likely to significantly persuade the city government to allocate increased funding.