

Verbal Diagnostic Test

20 Questions

Time: 30 Minutes

**For questions 1–6, select one entry for each blank from the corresponding column of choices.
Fill in the blank in the way that best completes the text.**

1. In interviews, despots are often surprisingly _____; this helps to explain how seemingly awful people are able to command so many followers.

malign
indignant
forgiving
personable
munificent

2. The thriving health food company sells _____ meat products so meat-like that vegetarians sometimes call the phone number on the box to make sure that the product is really animal-free.

mendacious
nugatory
ersatz
mimetic
clandestine

3. The successful tech company faces an ironic problem in the fall quarter; people are so excited about the next (i) _____ of its product, which will be released over the holidays, that they refuse to purchase the (ii) _____ version.

Blank (i) Blank (ii)

ingenuity	obsolete
implication	current
iteration	practical

4. Newborn babies are perfectly (i) _____, as yet unable to be concerned for others, or even to understand a difference between themselves and the world around them. As young children mature, they make the (ii) _____ discovery that other people exist and have their own needs and desires — in other words, that the entire world is not about them.

Blank (i) Blank (ii)

solipsistic	arresting
sophomoric	selfish
quixotic	undue

5. Historically, arguments against women's suffrage (i) _____ from the claim that women would cancel out their husbands' votes to the charge that women would merely (ii) _____ their husbands' preferences, thus making their votes redundant. Such arguments, while once convincing, today seem (iii) _____ indeed.

Blank (i) Blank (ii) Blank (iii)

ran the gauntlet	override	ponderous
ran the gamut	ape	shabby
held the line	disclaim	cogent

6. His theory purported that "proper" enjoyment of art was a matter of pure aesthetics — it is surely, he says, a baser pleasure being enjoyed by the untrained (i) _____, the museum "tourist" with (ii) _____ sensibilities, and even the art theorists and art historians who simply appreciate cultural referents or narratives in art, a predilection he thinks leads to (iii) _____ view of any art that includes such elements.

Blank (i) Blank (ii) Blank (iii)

cabal	incendiary	a facile
literati	parochial	an urbane
hoi-polloi	dulcet	a painstaking

Question 7 is based on the following reading passage.

During an economic depression, it is common for food prices to increase even as incomes decrease. Surprisingly, however, researchers determined that during a depression, for every 5 percent increase in the cost of bread, the lowest socioeconomic class actually increases the amount of bread purchased per capita by 3 percent.

7. Which of the following hypotheses best accounts for the researchers' findings?

- (A) Not all food costs increase during a depression; some food items actually become less expensive.
- (B) Because bread consumption does not increase by the same percentage as the cost does, people are likely consuming more of other food items to compensate.
- (C) When incomes decrease, people are typically forced to spend a larger proportion of their income on basic needs, such as food and housing.
- (D) People who suddenly cannot afford more expensive foods, such as meat, must compensate by consuming more inexpensive foods, such as grains.
- (E) During a depression, people in the lowest socioeconomic class will continue to spend the same amount of money on food as they did before the depression began.

Question 8 is based on the following reading passage.

Bedbug infestations have been a problem in major cities for years. The pesticide DDT has been found to be useful in killing bedbugs. However, DDT was banned in the United States and has been replaced by weaker pesticides. Thus, there is no effective means for eradicating bedbugs in the United States.

8. Which of the following, if true, most weakens the conclusion?

- (A) Bedbugs resemble other small insects in their appearance and behavior.
 - (B) Bedbugs have largely been eradicated in other parts of the world.
 - (C) Some treatments that do not include DDT have proven effective against bedbugs in other parts of the world.
 - (D) Bedbugs are resistant to the types of pesticides used to treat cockroach and ant infestations.
 - (E) The number of bedbug infestations has risen significantly in the 21st century.
-

Questions 9–12 are based on the following reading passage.

Dan Flavin's *the alternate diagonals of March 2, 1964 (to Don Judd)*, an 8-foot-long diagonal beam of light set at a 45-degree angle, is a colorful sculpture of light that is visually arresting, even from across the room. As one approaches the work, it is difficult not to become almost blinded by the intensity of the light and the vivacity of the colors. Though it may strike one as

5 garish on first glance, a more lengthy perusal reveals a delicate interplay between the red and yellow beams, giving the work a visual richness.

Alternate diagonals was made by Flavin in response to one of his own previous works, *the diagonal of May 25, 1963 (to Constantin Brancusi)*. His first piece composed solely of light, *the diagonal of May 25, 1963* was also an 8-foot-long fluorescent light sculpture (though Flavin

10 never liked to call them sculptures — he referred to them as “situations”) hung at a 45-degree angle, and also included a yellow fluorescent light tube. *Alternate diagonals* seems almost more of an evolution of the former work than a response to it, but regardless of the exact nature of the intended interplay between the two, it is important to frame *alternate diagonals* as a companion work.

15 *Alternate diagonals* is a kind of ready-made, entirely made of fluorescent lights that anyone could find in any hardware store and construct as Flavin has. This is precisely what is so intriguing about the work — it toys with the boundaries of what we can define as a ready-made in contemporary art and, perhaps, within the field of art production itself. It forces a spectrum to be employed instead of a black-and-white categorization of the ready-made — a spectrum

20 stretching between the “pure” ready-made (any work that essentially could be transferred straight from anyone’s garage to a gallery, such as Duchamp’s *Bottle Rack*), all the way to a contemporary two-dimensional work where the artist’s canvas and paints were purchased from an art supply store in an infinitely more manipulated but still semi-“readymade” fashion. Flavin’s piece, it seems, is situated somewhere in the center of such a spectrum, and raises the

25 question of where the “ready” ends and the “made” begins.

9. The main point of the passage is to

- (A) assert the superiority of ready-made art
- (B) decry the broadening of the definition of art

- (C) discuss a work in context and its effect on the discipline
- (D) explain the relationship between two works of art
- (E) praise an artist and his creations

10. According to the passage, both “diagonal” works could best be described as

- (A) using red and yellow light
- (B) initially striking the viewer as garish
- (C) toying with boundaries of art
- (D) running through the plane at a particular slope
- (E) identical in concept

11. The author’s tone could best be described as

- (A) admiring and supportive
- (B) enthusiastic and fawning
- (C) respectful and distant
- (D) obligatory and unenthused
- (E) erudite and objective

12. The passage implies which of the following?

- (A) Conventional two-dimensional work is a thing of the past.
- (B) Flavin is one of the most important artists of his time.
- (C) *Bottle Rack* has very little artistic manipulation.
- (D) Flavin disliked the word *sculpture* because of the Renaissance association.
- (E) The best art work is in the center of the artistic spectrum of art production.

For questions 13–16, select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

13. Many young employees actively seek out mentors, but when managers attempt to mentor young employees who have not sought out mentoring, the help often comes across as presumptuous and _____.

- baneful
- noxious
- patronizing
- amenable
- pragmatic
- condescending

14. In previous decades, it was simply assumed that fathers of young children would work full-time and at the same intensity as they did before becoming parents, but today, increasing numbers of men — wanting to further their careers but also wanting to spend time with their children — are more _____ about this arrangement.

- stolid
- ambiguous
- whimsical

- ambivalent
- equivocal
- officious

15. The slipstream is a partial vacuum created in the wake of a moving vehicle that allows for “drafting,” whereby a racecar can _____ another by taking advantage of reduced wind resistance.

- supersede
- assume
- overtake
- champion
- collide
- outstrip

16. While the celebration of the artist’s work was pure paean — nothing but plaudits and tributes — many of those in the art world feel that an acknowledgment of the artist’s _____ would help to humanize the artist and make the art more accessible.

- faculties
- poultices
- foibles
- mores
- aptitudes
- peccadilloes

Questions 17 and 18 are based on the following reading passage.

In keeping with the notable incorporation of operatic elements into the rock music lexicon, the genre in the 1970’s experienced a significant shift in emphasis away from recording and toward music performance itself. Several factors effected this change. First, the extended length and the moralizing subject matter of songs of the era rendered them less appropriate

for radio play and more suitable for public presentation. Additionally, the advent of the concept album, in which multiple tracks revolved around a single unifying narrative or theme, furnished a basis upon which 5 similarly calibrated performances could be enacted. Finally, as PA system technology improved, it became possible to hold concerts with 100,000 people or more, which encouraged artists to craft concerts that diverged from the merely musical toward

the experiential. Bands began conceiving of their performances as *shows*, more akin to musical theater guided by plot and setting than to the traditional concert guided by the omnipresent set-list. Instead of simply playing 10 one song after another, therefore, bands developed full performance medleys revolving around specific motifs, and punctuated by bombastic light shows, costume changes, and other massive stunts. For example, the popular British band

15 Pink Floyd famously built a barrier in the middle of stage during one performance then had it dramatically knocked down mid-show as a promotion for their new album *The Wall*.

17. The passage cites all of the following as reasons for the inclusion of operatic elements into the rock music genre in the 1970’s EXCEPT:

- (A) Changes in concert equipment changed the way shows could be delivered.

- (B) Pink Floyd's dramatic staging served to promote an influential album.
- (C) Shifts in the content of the music contributed to the songs having a more "story-telling" quality.
- (D) One medium through which rock songs had typically been delivered to the public became less conducive to the genre.
- (E) Artists altered their performances to reflect changes in the modern concert ambiance.

18. In the context of the passage, the word *effected* (line 3) most nearly means

- (A) influenced
- (B) moved forward
- (C) transformed
- (D) determined
- (E) brought about

Questions 19 and 20 are based on the following reading passage.

In 1977, the Community Reinvestment Act was passed for the purpose of reducing discriminatory credit practices in low-income neighborhoods. The act required Federal financing supervisory agencies to use their authority to encourage lending institutions to meet the credit needs of all borrowers in their communities. The CRA had little impact until 1993,

5 when the Department of Housing and Urban Development (HUD) initiated legal proceedings against lenders who declined too many applications from minority borrowers.

Some argue that, while providing equal access to credit is an important aim, pressure on lenders from HUD led to practices that later caused those same lenders to be assailed as "predatory." In *Housing Boom and Bust*, economist Thomas Sowell wrote that the CRA, far from

10 being as benign as it appeared, was based on a flawed assumption: that government officials were qualified to tell banks how to lend the money entrusted to them by depositors and investors.

Consider each of the answer choices separately and indicate all that apply.

19. It can be inferred from the passage that

- the CRA was perceived by some as seemingly innocuous
- HUD had the ability to affect banking practices
- Thomas Sowell has asserted that prerequisites exist for the act of directing banks' lending activities

Consider each of the answer choices separately and indicate all that apply.

20. Which of the following can be inferred about discriminatory credit practices?

- They are more common in middle-income neighborhoods than in high-income neighborhoods.
- Legislators who voted for the CRA did so because they were opposed to such practices.
- Critics allege that attempts to combat such practices can have unintended consequences.

Verbal Diagnostic Test: Answer Tally Sheet

Question #	Your Answer	Correct Answer	Tally your correctly answered questions. <i>No partial credit!</i>	Find more questions like this in chapter:
1		Personable		3
2		Ersatz		3
3		Iteration, current		3
4		Solipsistic, arresting		3
5		Ran the gamut, ape, shabby		3
6		Hoi-polloi, parochial, facile		3
7		(D)		6
8		(C)		6
9		(C)		5
10		(D)		5
11		(A)		5
12		(C)		5
13		Patronizing, condescending		4
14		Ambivalent, equivocal		4
15		Overtake, outstrip		4
16		Foibles, peccadilloes		4
17		(B)		5
18		(E)		5
19		I, II, and III		5
20		III only		5
	Raw Verbal Score: (# of verbal questions answered correctly)			

Verbal Diagnostic Test: Scoring Guide

Raw Verbal Score	Verbal Reasoning Diagnostic Scaled Score
20	169 – 170
19	168 – 170
18	166 – 168
17	163 – 165
16	161 – 163
15	159 – 161
14	157 – 159
13	156 – 158
12	154 – 156
11	152 – 154
10	150 – 152
9	149 – 151
8	147 – 149
7	145 – 147
6	143 – 145
5	140 – 142
4	137 – 139
3	133 – 136
2	130 – 132
1	130 – 131
0	130

NOTES:

Diagnostic Scaled Score is approximate.

- (a) If your time for this diagnostic section exceeded the 30-minute guideline, this approximate score may not be indicative of your performance under standard time conditions.
- (b) Scaled Score depends not only on how many questions were answered correctly (Raw Score), but also on the overall difficulty of the set of questions. This diagnostic test approximates the difficulty of the official GRE® revised General Test.

Verbal Diagnostic Test Answers

1. **Personable.** Because you are told that something explains how awful people *command so many followers*, you need a positive word in the blank. While both *forgiving* and *munificent* (meaning “generous”) are positive, neither of them make much sense. *Personable*, meaning “pleasant in appearance and manner,” fits best.
2. **Ersatz.** It is clear from “vegetarians” and “animal-free” that the meat products are fake, or *ersatz*. Note the many trap answers: *mendacious* (lying), *nugatory* (without value), *mimetic* (copying), and *clandestine* (hidden), all of which are inappropriate to describe fake meat.
3. **Iteration, current.** This sentence is clearly comparing two “versions” of a product. For the first blank, you need a synonym of “version,” such as *iteration*. For the second blank, you’re contrasting something to the “next iteration,” which would be the *previous* one. *Current* works well here (and *obsolete* is too judgmental; it’s not *obsolete* yet!).
4. **Solipsistic, arresting.** *Solipsism* is literally the theory that only the self exists or can be known to exist (*solipsistic* is sometimes used a bit figuratively to mean “really selfish”). For the second blank, the “discovery” in question is that *the entire world is not about them*. That’s a pretty earth-shaking discovery for someone who thought otherwise! *Arresting* gets this across. Note the trap answer *selfish*, which is related to the overall meaning of the sentence but does not describe the “discovery.”
5. **Ran the gamut, ape, shabby.** In the first blank, you need something that means “ranged.” Your clue is the two very different beliefs described — that women’s votes would be the opposite of their husbands’, or that the votes would be the same and therefore “redundant.” *Ran the gamut* gets this across (much like the expression “from A to Z”). In the second blank, *ape* means “mimic” or “copy.” In the third blank, you need something that goes against “convincing.” *Shabby* means “old and worn-out.” It can describe clothes or furniture, but is often used metaphorically (such as in the expression “not too shabby,” which can describe any job well-done). None of the other choices oppose *convincing*.
6. **Hoi-polloi, parochial, facile.** The theory being described is a theory of incredible snobbery! First of all, the person described thinks that there is a “proper” enjoyment of art (and, presumably, an improper one as well). He thinks that untrained people viewing art enjoy only “baser pleasures,” and calls other people “museum tourists.” In the first blank, *hoi-polloi* matches the idea of common people, the masses. Regarding the museum “tourist,” *parochial* matches the idea of ordinary, low-class, unsophisticated. Similarly, the art theorists and art historians are thought to have a *facile*, or overly simple, view. The theorist seems to think that only *aesthetic* (relating to beauty) elements should matter; the theorists and historians he disdains are those who like “cultural referents or narratives” — that is, recognizable themes or figures, or stories.
7. **(D).** This “reading comprehension” question is really a logic question. Such questions typically consist of a single paragraph with one question. First, analyze the argument: During a depression, it is normal for food prices to increase at the same time that incomes decrease. Logically, this would make it more difficult for people to afford the same food that they used to purchase prior to the depression. A study showed a surprising result, however: when the cost of bread went up during a depression, the poorest people actually bought more bread. Note that the argument doesn’t say merely that more money is spent on bread; that would be expected if the price increased. The argument says that the actual amount of bread purchased increased. The correct answer will explain why people would buy more bread even though the cost has gone up and incomes have declined.

While choice (A) is likely true in the real world, it does not explain why people buy more bread when the cost of bread has increased and incomes have declined. Choice (B) is an example of faulty logic. It is true that the cost increase is a higher percentage than the consumption increase, but this does not mean that people are consuming less bread and therefore need to eat other things to compensate. In fact, the opposite is true: the argument explicitly states that people are buying more bread than they were! (C) is tempting because it talks about people spending a “larger” proportion of income on food — but “proportion” is a value relative only to the person’s income level. It does not indicate that the person is spending more money on something. More importantly, though, this choice does not answer the question asked. Correct choice (D), in contrast, provides a reason why an increase in the cost of one food item might cause people to consume more of that item despite a loss of income: other food items are even more expensive and are, thus, much less affordable. The people still need some amount of food to survive, so they purchase more of the food item that does not cost as much money. This accounts for the researchers’ findings. Even if (E) were true (and this would be difficult if incomes are decreasing), it would not explain why people buy more bread at a time when the bread costs more and incomes are declining.

8. (C). This is a logic question that asks you to weaken an argument. The author cites a problem, bedbugs, and a pesticide that is effective in killing them is no longer available for use. Thus, the author claims, there is no effective means to kill the bedbugs in the United States. The problem here is that the author makes a very large jump between *the best method* no longer being an option and there being *no effective method*. Finding something that attacks this assumption would be a good way to weaken the argument. Regarding choice (A), the behaviors of bedbugs have nothing to do with the ability to eradicate them. Choice (B) does not specify how bedbugs were eradicated in other parts of the world. It is possible that all successful eradication elsewhere relied on DDT. Correct choice (C) opens up the possibility that there might be an approved means to eradicate the dreaded bedbug in the United States. It also calls the author’s conclusion about there being *no effective means in the United States* into question. Choice (D), though largely out of scope, might be viewed as strengthening the author’s conclusion, as it points to more evidence that existing pesticides are not effective on bedbugs. However, eliminating one possibility is not the same as eliminating *all* possibilities, which is what the author does in the conclusion. As for choice (E), the number of infestations has nothing to do with the ability to eliminate bedbugs in the United States.

9. (C). After describing Flavin’s work, the author places it in context to another work in the second paragraph, then goes on to discuss its effect on the definitions of a type of art. (A) is a distortion as “superiority” is not mentioned. (B), if anything, is backwards, as the author seems to approve of the broadening. Choices (D) and (E) ignore the significant part of the passage that discusses the broadening of definitions.

10. (D). Both works are said to be set at 45 degree angles (thus, “at a particular slope,” which incidentally would happen to be 1 or -1). Choices (A), (B), and (C) are only explicitly mentioned in connection with *alternate diagonals*. (E) is incorrect, as the concept of the works is not discussed; furthermore, the author writes that *Alternate diagonals seems almost more of an evolution of the former work than a response to it*. If the second work is an “evolution,” the two works cannot be “identical.”

11. (A). The passage teems with positive words — “visually arresting,” “vivacity,” “intriguing,” to name just a few — and this indicates the author is biased in favor of the works. Thus, the neutral aspect of choices (C), (D), and (E) is incorrect. As for (B), *fawning* has a negative connotation and is an inappropriate attitude for a GRE author.

12. (C). Choice (C) must be true as the author cites *Bottle Rack* as an example of the extreme end of the ready-made spectrum, and contrasts it with a type of “infinitely more manipulated” work. As for (A), the passage only mentions such conventional work in passing and does not predict its future. The passage does not rank Flavin (B), nor does it explain why he disliked the word *sculpture* for his works (D). Similarly, the passage only suggests that Flavin’s work is in the center, not that such location is a virtue — the “best art work,” as in choice (E).

13. Patronizing, condescending. The blank describes “help” offered by managers to young employees who do not want help. Furthermore, the help is “presumptuous.” Giving arrogant, unwanted help is *patronizing* or *condescending*. Note that *baneful* and *noxious* are similar to each other, but much too negative.

14. Ambivalent, equivocal. Since the men described want to further their careers but also spend time with their children, their feelings about the traditional working arrangement are *mixed* or *complex*. *Ambivalent* and *equivocal* match the idea of mixed feelings. Note trap answer *ambiguous*, which means “unclear,” and is more appropriate for describing a situation or statement than a person.

15. Overtake, outstrip. The slipstream allows a racecar to take advantage of “reduced wind resistance,” which means the trailing car would likely go faster than the car in front of it. You need a word like *pass*. *Supersede* may look the part, but it’s actually a figurative word, like *supplant* (e.g., I was *supplanted* by younger workers at my job.) Only *outstrip* and *overtake* carry the literal meaning of “physically passing something.”

16. Foibles, peccadilloes. “Paean” is praise, as are “plaudits and tributes.” You are told that the celebration was “pure” praise. The pivot word *while* tells you that the rest of the sentence should go in the opposite direction. Acknowledging flaws and mistakes — that is, *foibles* and *peccadilloes* — can indeed help to humanize an artist.

17. (B). While it is true that Pink Floyd’s dramatic staging served to promote its album, this is not a *reason for the inclusion of operatic elements into the rock music genre in the 1970’s*. It is an example, not a cause. (A) is incorrect because you are told that PA systems (a type of concert equipment) changed; (C) is incorrect because you are told that concept albums contained “narrative” themes; (D) is incorrect because you are told that rock songs were less appropriate for radio play, and (E) is incorrect because you are told that the larger concerts *encouraged artists to craft concerts that diverged from the merely musical toward the experiential*.

18. (E). The passage tells you about several phenomena occurring in the 1970’s that were in part responsible for the incorporation of operatic elements into the rock music lexicon. These factors thus helped to “bring about,” or *effect*, this change. Don’t get confused by *influenced*, one synonym of which is “affected.”

19. I, II, and III. Sowell wrote that the CRA was *far from being as benign as it appeared*. Thus, the CRA *appeared* benign, or *innocuous*, at least to some. You are told that HUD exerted pressure on lenders, which led to practices that later caused those same lenders to be assailed as “predatory.” Thus, HUD had the ability to affect banking practices. Finally, Sowell argued that the idea “that government officials were qualified to tell banks how to lend” was a “flawed assumption.” Since Sowell argues that government officials were not necessarily qualified, it follows that he thinks that such qualifications, or *prerequisites*, exist.

20. III only. You are told that discriminatory credit practices existed in low-income neighborhoods. Do not assume that there is a linear relationship wherein such practices occur most in low-income neighborhoods, less in middle-income neighborhoods, and least in high-income neighborhoods. Maybe such practices exist *only* in low-income neighborhoods. This choice is out of scope. The second choice is also out of scope — you have no way to know what legislators were thinking or feeling when they voted for the CRA. You do have good proof for the third statement — since some argue that *pressure on lenders from HUD led to practices that later caused those same lenders to be assailed as “predatory,”* you can safely conclude that some critics think that attempts to combat discriminatory credit practices (passing the CRA and enforcing it through HUD) can have unintended consequences — in this case, replacing a lack of lending with predatory lending.



Chapter 17

Practice Test 1

SECTION 1: ISSUE TOPIC

Directions:

You will be given a brief quotation that states or implies an issue of general interest and specific instructions on how to respond to that issue. You will have 30 minutes to plan and compose a response in which you develop a position on the issue according to the specific instructions. A response to any other issue will receive a score of zero.

“Governments are justified in circumventing civil laws when doing so is vital to the protection of national security.”

Write an essay in which you take a position on the statement above. In developing and supporting your position, you should consider ways in which the statement might or might not hold true.

SECTION 2: ARGUMENT TOPIC

Directions:

You will be given a short passage that presents an argument, or an argument to be completed, and specific instructions on how to respond to that passage. You will have 30 minutes to plan and compose a response in which you analyze the passage according to the specific instructions. A response to any other argument will receive a score of zero.

Note that you are NOT being asked to present your own views on the subject. Make sure that you respond to the specific instructions and support your analysis with relevant reasons and/or examples.

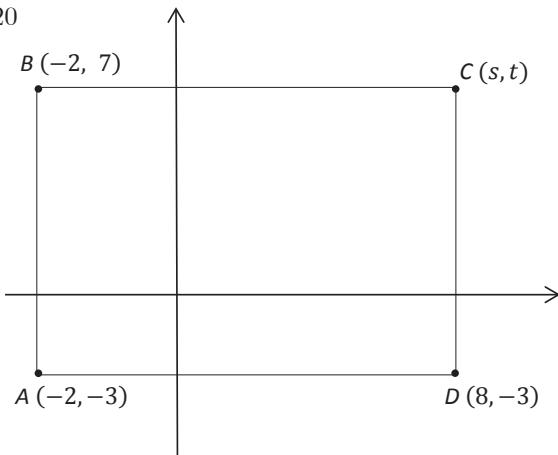
The following is from a recent email from the Diord Corp. Human Resources Manager: “Tobor Technologies found that mental health problems and mental illness were responsible for about 15 percent of employee sick days. Tobor amended its employee insurance plan so that workers receive the same coverage for mental illness as they do for physical illness. In addition, the company hired an on-site psychologist and created a system that allows workers to schedule confidential counseling appointments. After one year, the number of sick days used by employees declined by 10 percent. Diord Corp. has had an increase in employee sick days over the past two years, so we should introduce a similar insurance plan and counseling program. These measures will surely reduce employee absenteeism and cause an increase in productivity.”

Write a response in which you examine the argument’s unstated assumptions, making sure to explain how the argument depends on the assumptions and what the implications are if the assumptions prove unwarranted.

SECTION 3: QUANTITATIVE REASONING

For each of Questions 1 to 7, compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given. Select one of the following four answer choices and fill in the corresponding circle to the right of the question.

1 of 20



Quantity A

s

Quantity B

t

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

2 of 20

A certain punch is created by mixing two parts soda and three parts ice cream. The soda is 4 parts sugar, 5 parts citric acid, and 11 parts other ingredients. The ice cream is 3 parts sugar, 2 parts citric acid, and 15 parts other ingredients.

Quantity A

Parts sugar in the punch

Quantity B

Parts citric acid in the punch

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

3 of 20

The average (arithmetic mean) high temperature for x days is 70 degrees. The addition of one day with a high temperature of 75 degrees increases the average to 71 degrees.

Quantity A

x

Quantity B

5

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

SECTION 3: QUANTITATIVE REASONING

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Each angle in $\triangle QRS$ has a degree measurement of either x or y and the angles are expressed by the equation $2x + y = 180$

<u>Quantity A</u>	<u>Quantity B</u>
Perimeter of QRS	17

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

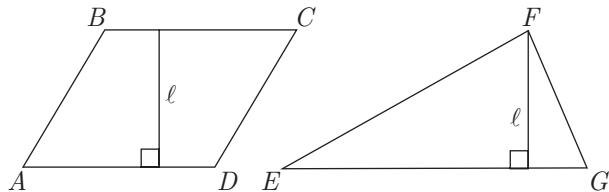
5 of 20

The scores for the 500 students who took Ms. Johnson's final exam have a normal distribution. There are 80 students who scored at least 92 points out of a possible 100 total points and 10 students who scored at or below 56.

<u>Quantity A</u>	<u>Quantity B</u>
The average (arithmetic mean) score on the final exam	87

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

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AB is parallel to CD .

AD is parallel to BC .

$$2AD = EG$$

<u>Quantity A</u>	<u>Quantity B</u>
The area of $ABCD$	The area of EFG

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

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$$(3x - 4y)(3x + 4y) = 2$$

<u>Quantity A</u>	<u>Quantity B</u>
$9x^2 - 16y^2$	4

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

8 of 20

If $8a - 2 = 22$, then $4a - 1 =$

- 2
- $\frac{11}{4}$
- 11
- 12
- 44

SECTION 3: QUANTITATIVE REASONING

9 of 20

Twenty percent of the sweaters in a store are white. Of the remaining sweaters, 40 percent are brown, and the rest are blue. If there are 200 sweaters in the store, then how many more blue sweaters than white sweaters are in the store?

Click on the answer box and type in a number.

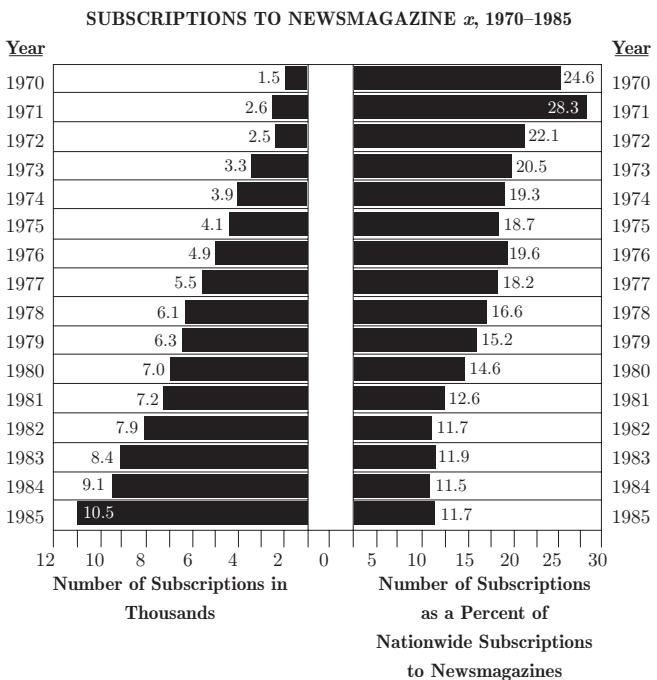
Backspace to erase.

10 of 20

$$\frac{4^{13} - 4^{12}}{4^{11}} =$$

- 0
- 1
- 4
- 12
- 16

Questions 11 through 14 refer to the following graph.



Note: Drawn to scale

NATIONWIDE NEWMAGAZINE SUBSCRIPTIONS:
1972 TO 1984

Newsmagazine	1972	1975	1978	1981	1984
x	2,500	4,100	6,100	7,200	9,100
y	1,700	3,100	4,600	5,700	7,200
z	3,600	5,800	7,600	9,400	11,400
Others	3,500	8,900	18,500	34,700	51,300

11 of 20

What was the total number of subscriptions for Newsmagazine x during the year in which Newsmagazine x accounted for 14.6 percent of nationwide news magazine subscriptions?

- 1,020
- 1,980
- 6,300
- 7,000
- 7,200

SECTION 3: QUANTITATIVE REASONING

12 of 20

In which of the following years did subscriptions to Newsmagazine z account for approximately $\frac{1}{6}$ of the total nationwide magazine subscriptions?

- 1984
- 1981
- 1978
- 1975
- 1972

13 of 20

What was the approximate percent increase in nationwide subscriptions to newsmagazines between 1970 and 1971?

- 4%
- 11%
- 26%
- 51%
- 73%

14 of 20

In 1973, what was the approximate number of subscriptions to newsmagazines nationwide?

- 3,000
- 13,000
- 16,000
- 20,000
- 67,000

15 of 20

If $a = (27)(3^{-2})$ and $x = (6)(3^{-1})$, then which of the following is equivalent to $(12)(3^{-x}) \times (15)(2^a)$?

- $5(-2245)(320)$
- $\frac{2}{5}$
- $\frac{5}{2}$
- $5(24)(38)$
- $5(2245)(320)$

16 of 20

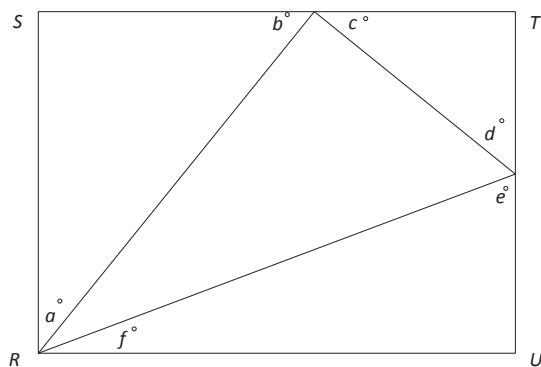
Jill has received 8 of her 12 evaluation scores. So far, Jill's average (arithmetic mean) is 3.75 out of a possible 5. If Jill needs an average of 4.0 points to get a promotion, which list of scores will allow Jill to receive her promotion?

Indicate all such sets.

- 3.0, 3.5, 4.75, 4.75
- 3.5, 4.75, 4.75, 5.0
- 3.25, 4.5, 4.75, 5.0
- 3.75, 4.5, 4.75, 5.0

SECTION 3: QUANTITATIVE REASONING

17 of 20



In the figure above, if $RSTU$ is a rectangle, what is the value of $a + b + c + d + e + f$?

 degrees

Click on the answer box and type in a number.
Backspace to erase.

18 of 20

If the probability of choosing 2 red marbles without replacement from a bag of only red and blue marbles is $\frac{3}{55}$ and there are 3 red marbles in the bag, what is the total number of marbles in the bag?

- 10
- 11
- 55
- 110
- 165

19 of 20

All first-year students at Red State University must take calculus, English composition, or both. If half of the 2,400 first-year students at Red State University take calculus and half do not, and one-third of those who take calculus also take English composition, how many students take English composition?

- 400
- 800
- 1,200
- 1,600
- 2,000

20 of 20

If $\frac{13!}{2^x}$ is an integer, which of the following represents all possible values of x ?

- $0 \leq x \leq 10$
- $0 < x < 9$
- $0 \leq x < 10$
- $1 \leq x \leq 10$
- $1 < x < 10$

NO TEST MATERIAL ON THIS PAGE

SECTION 4: VERBAL REASONING

For questions 1 through 6, select one entry for each blank from the corresponding column of choices. Fill all blanks in the way that best completes the text.

1 of 20

Since a large amount of the ore frequently located in riverbeds is (i) _____ on the earth's surface, where the processing of chemicals is less costly, recovery of underwater ore is not likely to become a (ii) _____ procedure.

Blank (i)

scanty
abundant
preserved

Blank (ii)

valuable
inexpensive
rejected

Question 2 of 20

It would be (i) _____ for our leaders, given their responsibilities as democratically elected officials, to neglect to do everything they could to (ii) _____ an entirely (iii) _____ problem.

Blank (i)

irresponsible
necessary
frivolous

Blank (ii)

forestall
sustain
cultivate

Blank (iii)

benign
unimportant
avoidable

3 of 20

Despite her mentor's advice that she attempt to sound consistently _____, the graduate student often resorted to using slang when presenting significant parts of her thesis, her habitual speech patterns overriding her years of learning.

lucid
didactic
panegyrical
erudite
rational

4 of 20

Although she felt Steve (i) _____ the subtlety of the delicious stew recipe with his addition of the sweet potato, she thought the pungent onion (ii) _____ the otherwise (iii) _____ taste combination.

Blank (i)

depleted
permeated
augmented

Blank (ii)

exaggerated
overwhelmed
satiated

Blank (iii)

delicate
zesty
detestable

SECTION 4: VERBAL REASONING

5 of 20

At first, a still-life painting can appear quite (i) _____, its focus on such everyday objects as flowers or fruits apparently uninspired. In the hands of (ii) _____ painter, however, careful attention to slight shifts of color and texture can lead to a truly (iii) _____ and exemplary painting.

Blank (i)
vital
luxuriant
banal

Blank (ii)
a gauche
an adept
an ascetic

Blank (iii)
unstinting
sublime
prosaic

6 of 20

The leaders of Ukraine’s “Orange Revolution” were a study in contrasts. At the center of the political storm stood Viktor Yushchenko, his once (i) _____ face transformed into a monstrous mask by dioxin poisoning; but, at his side, no one could miss the (ii) _____ Yulia Tymoshenko, soon to become the world’s only prime minister to adorn the covers of fashion magazines.

Blank (i)
quiescent
fatuous
comely

SECTION 4: VERBAL REASONING

For each of Questions 7 to 11, select one answer choice unless otherwise instructed.

Questions 7 through 9 are based on the following reading passage.

In analyzing the poetry of Mona Feather, we are confronted with three different yardsticks by which to measure her work. We could consider her poems as the product of a twentieth-century artist in the tradition of James Joyce, T.S. Eliot, and Wallace Stevens. However, to do so would be to ignore a facet that informs every word she writes and that stems from her identity as a woman. Yet, to characterize her solely as a woman poet is to deny her cultural heritage, for Mona Feather is also the first modern poet of stature who is also an American Indian.

Stanley Wilson has argued compellingly that the huge popularity Feather enjoys among the Indian reservation school population of the United States is creating a whole new generation of poetry enthusiasts in an age when the reading of poetry is on the wane. While this is undoubtedly true, Mr. Wilson's praise gives the impression that Feather's readership is limited to her own culture—an impression which hints that Mr. Wilson is himself measuring her by only one criterion. Radical feminist writers have long found in Feather's poetry a sense of self-pride which strikes a chord with their own more political philosophies. Her imagery, which always made use of the early Native American traditions in which the woman had an important role, was seen as the awakened sensibility of a kindred spirit.

Yet for all the "feminist" touches in her writing, it would be a disservice to consign Feather to the ranks of politicized writers, for her message is deeper than that. The despair that characterized twentieth-century modern poets is to be found in Mona Feather's work as well; she writes of the American Indians of the 1930s confined to ever-shrinking reservations and finds in that a metaphor for all of modern mankind trapped on a shrinking earth of limited resources.

7 of 20

The primary purpose of the passage is to

- describe the work of Mona Feather
- compare Feather with Joyce, Eliot, and Stevens
- show Feather's roots in her Native American heritage
- argue that Mona Feather's work can be looked at in several different ways
- discuss the women's movement in America

8 of 20

The passage implies that the author believes Stanley Wilson's view of Feather is

- a compelling and complete assessment of her work
- focused too much on her status as a Native American poet
- meant to disguise his opinion of Feather as a poet lacking in talent
- critical of Native American children's literary judgment
- based on all major themes and images in her poetry

9 of 20

The author mentions James Joyce, T.S. Eliot, and Wallace Stevens in order to

- compare the political messages in Feather's work to those in the work of other authors
- highlight the radical differences between male and female poets in the twentieth century
- contrast Feather's thematic choices with those of her contemporaries
- enumerate a list of artists whose sensibilities made them Feather's kindred spirits
- describe a critical context in which Feather's work can be analyzed

SECTION 4: VERBAL REASONING

Questions 10 through 11 are based on the following reading passage.

Among the more interesting elements of etymology is the attempt to derive the meaning of seemingly nonsensical expressions. Take, for instance, the increasingly archaic rural phrase “to buy a pig in a poke.” For centuries, the expression has been used to signify the purchase of an item without full knowledge of its condition. It relates to the common Renaissance practice of securing suckling pigs for transport to market in a poke, or drawstring bag. Unscrupulous sellers would sometimes attempt to dupe purchasers by replacing the suckling pig with a cat, considered worthless at market. An unsuspecting or naïve buyer might fail to confirm the bag’s contents; a more **urbane** buyer, though, would be sure to check and—should the seller be dishonest—“let the cat out of the bag.”

10 of 20

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

Which of the following phrases from the passage would help the reader infer the meaning of the word **urbane** as used in context?

- “increasingly archaic rural phrase”
- “without full knowledge”
- “unsuspecting or naïve buyer”

11 of 20

Select the sentence in which the author provides a definition for an antiquated term that may be unfamiliar to the reader.

For questions 12 through 15, select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

12 of 20

Although she was such a bad-mannered child that she was sent to a boarding school, as an adult she is the very model of _____.

- friendliness
- diffidence
- propriety
- reticence
- decorum
- brashness

13 of 20

Politicians sometimes appear to act in a manner that is almost _____; however, when all the information is released after the fact, it is apparent that they were acting according to a deliberate plan.

- pithy
- conventional
- conformist
- whimsical
- flawless
- capricious

SECTION 4: VERBAL REASONING

14 of 20

Forced to take an alternate road when a massive oil spill closed the highway, the two-hour detour made their already arduous trip even more _____.

- irksome
- onerous
- facile
- glib
- implacable
- immutable

15 of 20

Though many of her contemporaries found her odd, Ella Wilkins is now much admired for her _____ spirit, especially her willingness to reject prevailing feminine roles and to travel to foreign lands alone.

- forlorn
- magnanimous
- adventurous
- bellicose
- desolate
- doughty

For each of Questions 16 to 20, select one answer choice unless otherwise instructed.

16 of 20

Microfiber synthetics have been taking the place of natural fibers in an ever-increasing number of clothes because they provide the same durability and deplete fewer natural resources. A shirt made of microfiber synthetics is, however, three times as expensive to produce as a natural-fiber shirt. It follows that the substitution of microfiber synthetic clothes for natural-fiber clothes is, at this time, not recommended from a financial standpoint.

Which of the following statements, if true, most seriously weakens the argument?

- A microfiber synthetic shirt costs one-half the price of a natural-fiber shirt to maintain.
- The production of microfiber synthetic clothes necessitates garment factories to renovate obsolete machinery and to hire extra workers to operate the new machines.
- The upkeep of natural-fiber shirts is far less expensive than the upkeep of any other natural-fiber garment in current production.
- While producers anticipate that the cost of microfiber synthetics will remain stable, they recognize that the advent of recycling programs for natural fibers should bring down the costs of natural fibers.
- The cost of providing stain guards for microfiber synthetic shirts would probably be greater than what garment producers now spend on stain guards for natural-fiber shirts.

SECTION 4: VERBAL REASONING

Questions 17 through 18 are based on the following reading passage.

Scholars of early Buddhist art agree that Buddha images in human form emerged around the first century A.D. in the regions of Mathura, located in central India, and Gandhara, now part of Pakistan and Afghanistan. Uncertainty exists, however, about whether Mathura or Gandhara has the stronger claim to primacy. Those who believe that anthropomorphic sculptures of the Buddha first appeared in Gandhara point out that earlier Buddhist art was largely aniconic and that *bas relief* was far more common than sculpture. They argue that Greek influence in Gandhara promoted the development of the new style and form of representation of the divine. Other scholars make the case for indigenous development of such representations in Mathura, citing a centuries-long record of iconic art in pre-Buddhist traditions. They do not reject all foreign influence, but they argue that local traditions provided a strong foundation for the development of Buddhist sculpture.

Art historians bolster their arguments by highlighting distinctive features of the sculptures from each region. For example, the artists of Gandhara sculpted their Buddhas in heavy, pleated drapery, similar to that of Greek statues. Wavy lines indicating hair also reflect Greek influence. Mathura Buddhas, on the other hand, are portrayed wearing lighter robes draped in a monastic style, often with part of the shoulder and chest left bare. Elongated earlobes and strong facial features characterize Mathura images of the Buddha, whereas Gandhara images possess more angular features. Sorting out dates and directions of influence has proven difficult, but the totality of evidence suggests that the Buddha image evolved simultaneously in both regions and was shaped by the predominant cultural influences in each region.

17 of 20

Which of the following, if true, would those who believe that anthropomorphic images of Buddha originated in Gandhara be likely to cite as evidence for their viewpoint?

- Pre-Buddhist subcultures in the Gandhara region created representations of their deities in human form.
- Mathuran Buddhas' lightweight robes appear to have been modeled on the real robes of people who lived in a warm climate.
- Gandharan artists were isolated from the larger society and not exposed to influences from outside the region.
- Rulers from the Mathura region had political ties to Greek rulers and frequently exchanged gifts with them.
- The hairstyles worn by Gandharan Buddhas are similar to those depicted on Greek pottery from the same period.

18 of 20

According to the passage, Buddhist art

- first appeared in regions that are now part of India, Pakistan, and Afghanistan
- experienced a period during which human representations of the Buddha were not common
- characteristically portrayed figures with elongated earlobes and strong facial features
- began to appear in the medium of *bas relief* as a result of Greek influence
- was more influenced by foreign artworks than by indigenous artistic traditions

SECTION 4: VERBAL REASONING

Questions 19 through 20 are based on the following reading passage.

In 1887, Eugene Dubois began his search in Sumatra for the “missing link”—the being that would fill the evolutionary gap between ape and man. He discovered a fossilized human-like thighbone and a section of skull. He confirmed that these fossils were of significant age by examining other fossils in the same area. The thighbone’s shape indicated that it belonged to a creature that walked upright. Dubois estimated the size of the creature’s skull from the skull fragment and concluded that this creature’s brain volume was between that of the higher primates and that of current humans. Although the concept of “missing link” has changed dramatically and a recent analysis showed Dubois’s fossils to be far too recent for humans to have evolved from this “missing link,” the value of his discovery and the debate it generated is unquestionable.

19 of 20

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

The passage supplies information to answer which of the following questions?

- What was the approximate age of the fossils found by Dubois?
- Does Dubois’s find meet current definitions of the “missing link”?
- Do the flaws in Dubois’s conclusions invalidate his work?

20 of 20

Select a sentence in which the author reaches a conclusion.

NO TEST MATERIAL ON THIS PAGE

SECTION 5: QUANTITATIVE REASONING

For each of Questions 1 to 7, compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given. Select one of the following four answer choices and fill in the corresponding circle to the right of the question.

1 of 20

The circle with center R has a radius of 6 and is inscribed inside square $ABCD$

Quantity A

The area of the largest triangle that can be drawn inside square $ABCD$

Quantity B

The area of the circle with center R

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

2 of 20

$$\frac{a}{xs} = 632 \text{ and } \frac{a}{ys} = 158$$

Quantity A

x

Quantity B

y

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

3 of 20

Quantity A

The remainder when 135 is divided by 7

Quantity B

The remainder when 135 is divided by 19

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

4 of 20

a and b are integers.

$$a^2 = b^3$$

Quantity A

a

Quantity B

b

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

5 of 20

$$ab < 0$$

$$bc > 0$$

Quantity A

ac

Quantity B

0

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

6 of 20

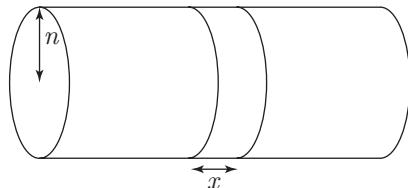
$$\begin{aligned}|x| &= 6 \\ y &= x + 4\end{aligned}$$

Quantity A y **Quantity B**

10

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

7 of 20



A rectangular ribbon of width x is wrapped around the right circular cylinder with radius n shown above, encircling the cylinder without overlap. The area of the ribbon is equal to the area of the base of the cylinder.

Quantity A x **Quantity B** n

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

8 of 20

List A: 1, 2, 7, 8, 15, 2, 3, 5, 6, 13

 x is the median of the even numbers in List A. y is the median of the prime numbers in List A. z is the median of the least and greatest numbers in List A.**Quantity A**The median of $2x$, y , and z **Quantity B** z

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

9 of 20

Oil is pumped from a well at a rate of 500 gallons per hour. How many gallons of oil are pumped from the well in 3 hours and 15 minutes?

gallons

Click on the answer box and type in a number.
Backspace to erase.

10 of 20

A certain pet store sells only dogs and cats. In March, the store sold twice as many dogs as cats. In April, the store sold twice the number of dogs that it sold in March, and three times the number of cats that it sold in March. If the total number of pets the store sold in March and April combined was 500, how many dogs did the store sell in March?

- 80
- 100
- 120
- 160
- 180

SECTION 5: QUANTITATIVE REASONING

11 of 20

In the coordinate plane, rectangle $WXYZ$ has vertices at $(-2, -1)$, $(-2, y)$, $(4, y)$, and $(4, -1)$. If the area of $WXYZ$ is 18, what is the length of its diagonal?

- $3\sqrt{2}$
- $3\sqrt{3}$
- $3\sqrt{5}$
- $3\sqrt{6}$
- $3\sqrt{7}$

12 of 20

How many three-digit integers can be created from 5 distinct digits?

- 10
- 15
- 20
- 30
- 60

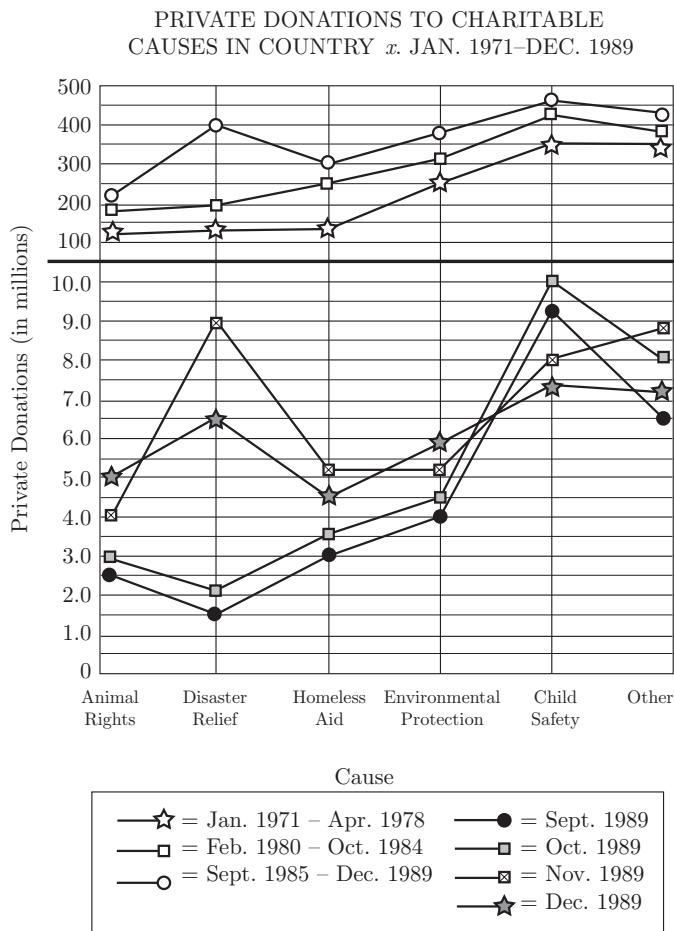
13 of 20

At Megalomania Industries, factory workers were paid \$20 per hour in 1990 and \$10 per hour in 2000. The CEO of Megalomania Industries was paid \$5 million per year in 1990 and \$50 million per year in 2000. The percent increase in the pay of Megalomania's CEO from 1990 to 2000 was what percent greater than the percent decrease in the hourly pay of Megalomania's factory workers over the same period?

- 850%
- 900%
- 950%
- 1,700%
- 1,900%

SECTION 5: QUANTITATIVE REASONING

Questions 14 through 16 refer to the following graph.



14 of 20

If there were 38 child safety organizations and the funds contributed to these organizations in September 1989 were evenly distributed, how much did each charity receive?

- \$12,000,000
- \$9,400,000
- \$2,500,000
- \$250,000
- \$38,000

15 of 20

From September 1985 to December 1989, what was the approximate ratio of private donations in millions for homeless aid to private donations in millions for animal rights?

- 20 : 9
- 3 : 2
- 4 : 3
- 9 : 7
- 6 : 5

16 of 20

Which of the following charitable causes received the smallest percent increase in private donations from September 1989 to October 1989?

- Animal Rights
- Disaster Relief
- Homeless Aid
- Environmental Protection
- Child Safety

SECTION 5: QUANTITATIVE REASONING

17 of 20

In the repeating decimal $0.0653906539\dots$, the 34th digit to the right of the decimal point is

- 9
- 6
- 5
- 3
- 0

18 of 20

If $3x + 2y = 24$, and $\frac{7y}{2x} = 7$, then $y =$

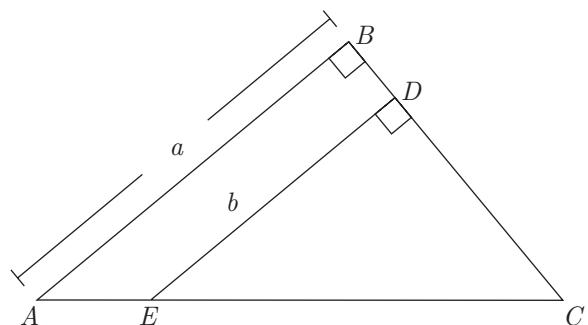
Click on each box and type in a number.
Backspace to erase.

19 of 20

If the average (arithmetic mean) of 6, 8, 10, and x is between 6 and 12, what is the greatest possible integer value of x ?

- 8
- 11
- 20
- 28
- 44

20 of 20



If $AB = BC$, which of the following is an expression for the area of quadrilateral $ABDE$?

- $\frac{a^2 - b^2}{2}$
- $\frac{a^2 + b^2}{2}$
- $a^2 - b^2$
- $\frac{a^2 - ab}{4}$
- $\frac{a^2 + ab}{4}$

SECTION 6: VERBAL REASONING

For questions 1 through 6, select one entry for each blank from the corresponding column of choices. Fill all blanks in the way that best completes the text.

1 of 20

Many fashions that were considered daring in their time have been so widely worn and imitated that the (i) _____ style is no longer seen as (ii) _____.

Blank (i)

proposed
original
revealing

Blank (ii)

outlandish
commonplace
copied

2 of 20

Western culture has so influenced Middle Eastern music that even the latter's roles of composer and performer, at one time inseparable, have now begun to _____.

divulge

retreat

retrench

diverge

fuse

3 of 20

Kazan was quickly (i) _____ by many of his contemporaries for his transgression, who saw his testimony as treachery, an act of (ii) _____ which stained how they viewed him both as an artist and as a man. It was only by continually making films that he was able to (iii) _____ his perceived sins and achieve some measure of atonement.

Blank (i)

rebuked
lauded
mitigated

Blank (ii)

perfidy
sophistry
redemption

Blank (iii)

exacerbate
deviate
expiate

4 of 20

Although tranquilizers usually have a _____ effect, this is not always the case, especially when the abuse of these drugs results in a failure to induce the much-desired sleep.

soporific

sedulous

coruscating

debilitating

penetrating

5 of 20

As a rule, (i) _____ interpretations of events are rejected by modern scientists in their attempts to find secular insights into the matrix of causes and effects in our modern world. Paradoxically, this fact does not (ii) _____ the existence of individual scientists who possess views that may be (iii) _____ with a belief in supernatural causes.

Blank (i)

falsifiable

preternatural

teleological

Blank (ii)

countenance

enhance

preclude

Blank (iii)

at variance

consonant

discrepant

6 of 20

The Johnsons were not known for their (i) _____; at the very least, none of the family members was fearful of (ii) _____, of appearing or acting differently from other people.

Blank (i)

candor

vulgarity

conformity

Blank (ii)

pettiness

eccentricity

complaisance

SECTION 6: VERBAL REASONING

For each of Questions 7 to 12, select one answer choice unless otherwise instructed.

Questions 7 through 10 are based on the following reading passage.

According to most scientists, the universe began approximately 10 to 15 billion years ago and has been expanding ever since. This theory, known as the Big Bang theory, is the fairly direct result of Hubble's law, which states that objects farther away from Earth are receding faster than those closer. This expansion implies a singular point which all matter is expanding from.

Complicating the scientific explanation is that the Big Bang cannot be thought of as an explosion from some identifiable source—rather, space and time were created in the Big Bang. Furthermore, the relationship between distance and speed is not precisely linear. So, if one were to think of galaxies as particles created in a big bang, these galaxies have both a local component of motion, as well as playing a role in the overall expansion of the universe.

A further complication is that galactic distances are so great that galactic motion, even if the galaxies are moving at incredible speeds, is difficult to observe. Scientists must therefore rely on a “standard candle,” an object of known brightness within the galaxy they wish to observe. Using the inverse square law, scientists can then measure how far that galaxy is away from our own. For instance, suppose a supernova in galaxy A appears one hundred times as bright as one in galaxy B. By the inverse square law, galaxy B is ten times farther away than galaxy A, assuming, of course, that distance is the only factor affecting brightness.

7 of 20

It can be inferred from the sentence highlighted in the passage that a standard candle is useful to scientists for which of the following reasons?

- Standard candles do not have their own locus of motion.
- Standard candles more reliably adhere to the law of inverse squares than do other supernovas.
- Only standard candles provide a known measure of brightness.
- Knowledge of an object's brightness allows scientists to measure the speed at which the object is moving toward Earth.
- Knowledge of an object's brightness allows scientists to accurately measure its distance from Earth.

8 of 20

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

According to the passage, if two astronomical objects of differing distances from Earth were observed, which of the following would be true of the object closer to Earth?

- It would not be as bright as the object farther from Earth.
- It would be younger than the object farther from Earth.
- It would be traveling away from the Earth more slowly than the farther object.

9 of 20

It can be inferred from the passage that a standard candle may not provide an accurate measure of distance if

- the galaxy being measured is moving too quickly
- interstellar dust makes the object measured appear dimmer than it really is
- if the galaxy being measured has a local component of measurement
- the particles being measured do not completely accord with a linear motion
- the galaxies being measured move at different speeds

10 of 20

According to the passage, if two supernovas are observed and one of those supernovas is brighter than the other, scientists can conclude that

- the brighter supernova is moving closer to our galaxy at a higher speed
- the precise location of the supernova is measurable
- the brighter supernova may be closer to our own galaxy
- the brighter supernova is farther away from Earth by a distance that is roughly inversely proportional to the dim supernova
- the distance between the supernovas and our own galaxy is inversely proportional

SECTION 6: VERBAL REASONING

Questions 11 through 12 are based on the following reading passage.

Throughout the twentieth century, it was accepted as fact that cells in our brains, called neurons, do not regenerate. Research by neurologist Elizabeth Gould overturned this core doctrine within the span of a few years. Her experiments on rats showed that even after suffering severe trauma, their brains were able to heal themselves by regenerating neurons. Gould's findings have incited a flood of new research into applications that may take advantage of neurogenesis.

One such study examines the role of reduced neurogenesis among individuals suffering from depression. It is speculated that neurogenesis may contribute to an explanation for the so called "Prozac lag." As an antidepressant, the immediate boost of serotonin caused by Prozac should have had instantaneous mood elevating effects. However, patients suffering from depression only begin to experience mood elevation weeks after beginning treatment. The study speculates that during this period, the brain may be regenerating neurons.

11 of 20

The author mentions the "Prozac lag" primarily in order to

- raise a possible objection to a newly proposed theory
- present a situation for which a new theory may serve an explanatory role
- offer evidence that runs counter to a previously held belief
- suggest a counterexample that undermines a newly proposed theory
- provide supporting evidence that a newly discovered phenomenon may have unforeseen effects

12 of 20

In the second paragraph, select the sentence in which the author describes an unexpected observation.

For questions 13 through 16, select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

SECTION 6: VERBAL REASONING

13 of 20

Plato, an important philosopher, is primarily known because he wrote down Socrates's _____ conversations. It is through Plato's record of these dialogues that Socrates's teachings have survived and continue to enlighten seekers of wisdom.

- inspiring
- edifying
- tedious
- grating
- rousing
- didactic

14 of 20

Even the colossal meal failed to _____ her voracious appetite.

- cadge
- exacerbate
- provoke
- satiate
- mendicate
- allay

15 of 20

Slicks of oil on a rain-soaked street are _____ and beautiful, but the lovely rainbows they produce on the asphalt can seem rather ugly when one reflects upon the road hazards they create and the environmental damage they entail.

- anodyne
- iridescent
- monocoque
- pavonine
- parietal
- saturnine

16 of 20

He had not always been so callous, but with time he became _____ to the violence around him.

- adorned
- cauterized
- sensitized
- ostracized
- inured
- attuned

SECTION 6: VERBAL REASONING

For each of Questions 17 to 20, select one answer choice unless otherwise instructed.

17 of 20

When the maker of Megapower, a vitamin supplement, modified its formula two years ago, Tasmania, an island off the coast of New Zealand, suffered a decrease in its export earnings. Tasmania's only export, kiwi fruit, constitutes a substantial portion of the world supply of that fruit. Researchers concluded that the old Megapower formula contained natural kiwi extract, but the new formula does not.

Which of the following, if true, gives the strongest support for the researchers' claim?

- Some South American countries have begun to grow kiwi fruit successfully.
- United States chemists have started development of a synthetic kiwi extract.
- The manufacturers of Megapower chose not to renew their contract with the Tasmanian kiwi growers.
- Imports of kiwi fruit have fallen in the country where Megapower is manufactured.
- There was a marked drop in sales of a number of formerly profitable items that used kiwi as an ingredient.

Questions 18 through 20 are based on the following reading passage.

While art historians do not necessarily agree on the date of the birth of modern art, they do agree that mid-nineteenth century French art shows a clear and distinct break from tradition. Pressed to point to a single picture that represents the vanguard of the modern art movement, art historians will often point to Courbet's *The Painter's Studio*.

The peculiar subtitle of Courbet's work, "Real allegory summing up a seven-year period of my life" confirms that Courbet was striving to do something strikingly original with his work. The argument has been made that the painting struck a blow for the independence of the artist, and that since Courbet's work, artists have felt freed from the societal demands placed upon their work. Paintings prior to Courbet's time were most often focused on depicting events from the Bible, history, or literature. With his singular painting, Courbet **promulgated** the idea that an artist is capable of representing only that which he can experience through his senses of sight and touch; the true artist will then be compelled to make his representation as simply and directly as possible.

18 of 20

Which of the following would most effectively replace the word **promulgated** as it is used in the context of the passage?

- Displayed
- Disseminated
- Proclaimed
- Concealed
- Secreted

SECTION 6: VERBAL REASONING

19 of 20

Select the sentence in the passage that best explains the effect of Courbet's work on other artists.

20 of 20

The effect that Courbet had on painting is most analogous to which situation?

- An avant-garde writer who subverts novelistic conventions
- A machinist who tinkers and improves his invention
- A watercolor painter who paints in the same style as his peers
- A scientist who comes up with a unified theory of several discordant scientific ideas
- A seamstress who makes a ball gown using several different types of fabric

A black and white photograph showing the back of a person's head, likely a teacher, wearing a light-colored shirt. They are standing in front of a chalkboard and writing mathematical equations with chalk. The equations include $f(x) = e^x (x^2 + 3)$, $f'(x) =$, and $f''(x) =$.

Chapter 19 Practice Test 2

SECTION 1: ISSUE TOPIC

Directions:

You will be given a brief quotation that states or implies an issue of general interest and specific instructions on how to respond to that issue. You will have 30 minutes to plan and compose a response in which you develop a position on the issue according to the specific instructions. A response to any other issue will receive a score of zero.

“Studying foodways—what foods people eat and how they produce, acquire, prepare, and consume them—is the best way to gain deep understanding of a culture.”

Write an essay in which you take a position on the statement above. In developing and supporting your position, you should consider ways in which the statement might or might not hold true.

SECTION 2: ARGUMENT TOPIC

Directions:

You will be given a short passage that presents an argument, or an argument to be completed, and specific instructions on how to respond to that passage. You will have 30 minutes to plan and compose a response in which you analyze the passage according to the specific instructions. A response to any other argument will receive a score of zero.

Note that you are NOT being asked to present your own views on the subject. Make sure that you respond to the specific instructions and support your analysis with relevant reasons and/or examples.

Fossil evidence indicates that the blompus—an extremely large, carnivorous land mammal—inhabited the continent of Pentagoria for tens of thousands of years until its sudden decline and ultimate extinction about twelve thousand years ago. Scientists have determined that the extinction coincided with a period of significant climate change and with the arrival of the first humans. Some scholars theorize that the climate change so altered the distribution of plants and animals in the environment that the food chain upon which the blompus depended was irretrievably disrupted. Others contend that predation by humans is the more plausible explanation for the rapid population decline.

Write a response in which you discuss specific evidence that could be used to decide between the proposed explanations above.

SECTION 3: VERBAL REASONING

For questions 1 through 6, select one entry for each blank from the corresponding column of choices. Fill all blanks in the way that best completes the text.

1 of 20

The (i) _____ with which a statement is conveyed is frequently more important to the listener in determining the intended meaning than the actual words (ii) _____. For example, a compliment, when delivered sarcastically, will be perceived by the receiver as fairly insulting.

Blank (i)

inflection
pitch
accuracy

Blank (ii)

implied
repudiated
utilized

2 of 20

Though a film studio produces works that are (i) _____ and artistic, its priorities often dictate that creativity be (ii) _____ to a secondary position since the creative process can (iii) _____ the organization and hierarchy necessary to running a large company.

Blank (i)

expressive
tedious
tiresome

Blank (ii)

compared
uplifted
relegated

Blank (iii)

respond to
conflict with
coexist with

3 of 20

Science and religion each have core tenets that are considered _____; however, because some scientific tenets are in conflict with some religious ones, these tenets cannot all be correct.

historic

axiomatic

disputable

ubiquitous

empirical

4 of 20

Although most preventative medical ointments commonly in use would have (i) _____ an infection, the particular one Helen applied to her sores actually, much to her dismay, (ii) _____ her (iii) _____.

Blank (i)

surrendered to
exacerbated
staved off

Blank (ii)

contributed to
detracted from
disbursed with

Blank (iii)

medicine
salve
affliction

5 of 20

A single (i) _____ remark can easily ruin the career of a politician, so most are trained to avoid such offhand remarks and instead stick to prepared talking points. This training can result in a lack of (ii) _____, however, and elicit in merely (iii) _____, lukewarm responses from crowds.

Blank (i)

elated
glib
pedantic

Blank (ii)

spontaneity
equanimity
rigidity

Blank (iii)

ardent
tepid
morose

6 of 20

Oscar Wilde's *The Importance of Being Earnest* satirizes the _____ nature of upper crust British society; its characters take trivial concerns seriously while thoughtlessly dismissing important ones.

maladaptive

insincere

unusual

insignificant

shallow

SECTION 3: VERBAL REASONING

For each of Questions 7 to 12, select one answer choice unless otherwise instructed.

Questions 7 through 10 are based on the following reading passage.

In 1798, economist Thomas Robert Malthus stated in his “Essay on the Principle of Population” that “population increases in a geometric ratio, while the means of subsistence increases in an arithmetic ratio.” However, Malthus’s dire prediction of a **precipitous** decline in the world’s population has not come to pass. The miscalculations in what has come to be known as the Malthus Doctrine are partly due to Malthus’s inability to foresee the innovations that allowed vast increases in worldwide wheat production.

In the late nineteenth century, the invention of the tractor staved off a Malthusian disaster. While the first tractors were not particularly powerful, the replacement of animals by machinery meant that land that had been devoted to hay and oats could now be reclaimed for growth of crops for human consumption. Nevertheless, the Malthusian limit might still have been reached if crop yield had not been increased.

A natural way to increase crop yield is to supply the soil with additional nitrogen. In 1909, chemist Fritz Haber succeeded in combining nitrogen and hydrogen to make ammonia, the white powder version of which, when added to the soil, improves wheat production. Haber nitrogen, however, was not widely used until later in the twentieth century, largely due to farmers’ resistance to spreading an unnatural substance on their crops. Haber’s invention had a further drawback: If applied in incorrect quantities, the wheat crop would grow taller and thicker, eventually toppling over and rotting.

Interestingly, in the late twentieth century the discovery of genetic engineering, which provides a means of increasing rice and maize production, met with equal resistance, this time from the environmental movement. Even without direct genetic engineering, it is likely that science will discover new methods to improve agricultural production.

7 of 20

According to the passage, which of the following is true about Haber nitrogen?

- Haber nitrogen is more effective at increasing the yield of wheat crops than that of maize or oat crops.
- Undesired effects can result from the application of surplus quantities of Haber nitrogen.
- Haber nitrogen was the first non-naturally occurring substance to be applied to crops as fertilizer.
- Haber nitrogen may not be effective if applied at an improper time in wheat’s growth cycle.
- Farmers were quick to adopt Haber nitrogen because it made their crops grow taller and thicker.

8 of 20

The passage implies all of the following EXCEPT

- world food production has kept pace with world population growth
- technological innovation is one factor that allowed for an increase in crop production
- farmers are not the only group that has opposed artificial efforts to increase crop yield.
- the Malthusian limit might well have been reached if new methods to increase crop production had not been found
- a Malthusian disaster would have been ensured if it were not for the invention of genetic engineering

SECTION 3: VERBAL REASONING

9 of 20

Which of the following, if true, would best represent Malthus' contention in the first paragraph?

- By 2040 the world's population increases marginally, and food production keeps pace with demand.
- By 2040 the world's population decreases marginally, and food production outstrips demand.
- By 2040 the world's population remains unchanged, and food production declines slightly.
- By 2040 the world's population has significantly increased, and food production has increased slightly.
- By 2040 the world's population has significantly decreased, and food production has decreased slightly.

10 of 20

Which of the following most nearly means the word precipitous, as used in context?

- anticipated
- deliberate
- gradual
- risky
- sharp

Questions 11 through 12 are based on the following reading passage.

The dearth of natural resources on the Australian continent is a problem with which government officials there have long struggled. As long distance travel has become less of an obstacle, the tourism industry has become ever more important to the national economy. Tourism represents more than 10 percent of national export earnings annually, and in less developed regions such as the Western Territory, the percentage is much higher.

Unfortunately, this otherwise rosy prospect has one significant cloud on the horizon. In recent years, there has been a move towards returning some of the land to the Aboriginal people. As Western society and culture have flourished on Australian soil, tribal people have been forced ever farther inland in an attempt to maintain their traditional ways of living, a desire that the government has striven to respect.

One of the central beliefs of the Aboriginal religion is that certain natural formations have spiritual significance and must be treated accordingly. Strict guidelines determine who may visit these sites and at what times. Unfortunately, many of these sites are the very natural wonders tourists flock to see. If non-Aboriginal people are forbidden to visit these natural wonders, many may choose not to vacation in a region that sorely needs the income generated by tourism.

The Australian government has dealt with this dilemma thus far by trying to support both sides. The Aboriginal council is still trying to put an end to such use of certain sites, however, and it remains to be seen whether respect for tradition or economic desires will ultimately triumph.

11 of 20

In the context of the passage, which of the following most closely matches the meaning of the phrase "otherwise rosy prospect has one significant cloud on the horizon"?

- A colorful sunset is marred by a dark storm cloud.
- A generally promising future has a potential problem.
- The view is beautiful but partially blocked.
- The future of the Aboriginal people is doubtful.
- Although the situation looks good, in reality it is hopeless.

12 of 20

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

According to the passage, which of the following is a cause of the current dispute between the Aborigines and the Australian government?

- economic hardships in certain regions of the country
- increasing dominance by European norms and lifestyles
- limited natural resources in most of Australia

SECTION 3: VERBAL REASONING

For questions 13 through 16, select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

13 of 20

George was a mercurial character; one moment he was optimistic about his prospects, and the next he was _____.

- immoral
- hopeful
- witty
- morose
- dour
- buoyant

14 of 20

Growing up in a wealthy suburb, she felt quite the _____ as she began her first job as a llama caretaker on a rural farm.

- tyro
- concierge
- agronomist
- cultivator
- neophyte
- curator

15 of 20

William Shakespeare's *Macbeth* was based upon a highly _____ version of events that the playwright wrought from Raphael Holinshed's *Chronicles of England, Scotland, and Ireland*; King Duncan's death at the hand of Macbeth comprises the play's only historical truth.

- anachronistic
- effusive
- embellished
- prosaic
- serpentine
- colored

16 of 20

While comic book artists such as Neal Adams demonstrated a more thorough mastery of human anatomy than did the generation that preceded them, some readers wondered whether the superheroes they drew were really supposed to be so _____ that every detail of their musculatures would be visible through their clothing.

- thewy
- sinewy
- superfluous
- pneumatic
- flocculent
- atrophied

SECTION 3: VERBAL REASONING

For each of Questions 17 to 20, select one answer choice unless otherwise instructed.

Questions 17 through 18 are based on the following reading passage.

One of the most curious structures in cellular biology is the telomere, a length of repeated bases located at the end of every chromosome that, unlike the rest of the DNA strand, carries no useful genetic information. While the telomere seems on the surface to be nothing more than a useless afterthought of DNA, a closer look proves that it is not only important, but also crucial to the functioning of any organism. Indeed, without this mundane structure, every cell division would be a step into senescence, and the onset of old age would begin at birth.

Scientists have found that during cell division not every base of the DNA strand can be replicated, and many, especially those near the end, are lost. If, instead of telomeres, our chromosomes stored valuable genetic information at the end of the DNA strand, then cell division would cause our cells to lose the ability to code for certain information. In fact, many ailments associated with normal old age begin only after the telomere buffer has been exhausted through years of cell division.

17 of 20

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

Which of the following can reasonably be inferred based on the passage?

- An individual who aged faster than the average person may have had a shorter telomere buffer than the average person.
- Scientists once believed that telomeres served no useful purpose.
- If DNA degradation were absent, then telomeres would be less important to human health.

18 of 20

The passage suggests that if telomere buffers did not exist

- problems associated with aging would begin earlier in life
- people would age so rapidly that almost no one would live past childhood
- cellular senescence would probably be prevented by DNA bases
- chromosomes would lose the ability to store genetic codes
- DNA strands would contain only useful genetic information

SECTION 3: VERBAL REASONING

Questions 19 through 20 are based on the following reading passage.

Music education in America emerged in the early eighteenth century out of a desire to ensure that church goers could sing the weekly hymns in tune. In 1721, John Tufts, a minister, penned the first textbook for musical education entitled *An Introduction to the Singing of Psalm Tunes*. Tufts's pedagogical technique relied primarily on rote learning, omitting the reading of music until a student's singing abilities had improved.

In the same year that Tufts's publication emerged, Reverend Thomas Walter published *The Ground Rules of Music Explained*, which, while also focusing on preparing students to sing religious music, took a note-based approach by teaching students the rudiments of note reading from the onset. The "note versus rote" controversy in music education continued well into the mid-nineteenth century. With no curriculum to guide them, singing school teachers focused on either the rote or note method with little consistency.

19 of 20

The author discusses Walter's pedagogical technique in order to

- suggest that rote learning is superior to note learning
- present a contrast with Tuft's educational technique
- argue that rote learning improves a student's singing ability
- show the origin of Tuft's educational techniques
- show that rote learning was inconsistently practiced

20 of 20

Select the sentence in the passage that best describes the endurance of the tension between pedagogical techniques.

SECTION 4: QUANTITATIVE REASONING

For each of Questions 1 to 8, compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given. Select one of the following four answer choices and fill in the corresponding circle to the right of the question.

- (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.

1 of 20

Quantity A

$$\frac{98^7}{7^{63}}$$

Quantity B

$$\frac{2^7}{7^{49}}$$

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

2 of 20

5 is r percent of 25

s is 25 percent of 60

Quantity A

r

Quantity B

s

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

3 of 20

g and h are positive integers such that the value of g is twice the value of h .

Quantity A

The ratio of g to 1

Quantity B

The ratio of 1 to h

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

4 of 20

Quantity A

The average (arithmetic mean) of 67, 78, x , and 101

Quantity B

The average (arithmetic mean) of 66, 79, x , and 102

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

5 of 20

In a certain country the total weight of recycled newspapers increases by 0.79 million tons over the previous year.

Quantity A

Percent increase in the weight of recycled newspapers in 1989 over 1988

Quantity B

Percent increase in the weight of recycled newspapers in 1990 over 1989

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

SECTION 4: QUANTITATIVE REASONING

6 of 20

Quantity A

The total weight of m peanuts at a weight of $n + 3$ mg each

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

Quantity B

The total weight of n almonds at a weight of $m + 3$ mg each

9 of 20

If $4(r - s) = -2$, then what is r , in terms of s ?

- $\frac{-s}{2}$
- $s - \frac{1}{2}$
- $s - \frac{3}{2}$
- $s + 2$
- $2s$

7 of 20

Quantity A

$5^{27}(575)$

Quantity B

$5^{28}(115)$

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

10 of 20

At Tenderloin Pharmaceuticals, 25 percent of the employees take the subway to work. Among those who ride the subway, 42 percent transfer from one subway line to another during their commutes, and the rest do not transfer. What percent of all employees transfer lines?

 percent

Click on the answer box and type in a number.
Backspace to erase.

8 of 20

Alejandro has a six-sided die with faces numbered 1 through 6. He rolls the die twice.

Quantity A

The probability that both rolls are even

Quantity B

The probability that neither roll is a multiple of 3

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

11 of 20

$$\frac{a + \frac{b}{c}}{\frac{d}{e}}$$

If the value of the expression above is to be halved by doubling exactly one of the five numbers a , b , c , d , or e , which should be doubled?

- a
- b
- c
- d
- e

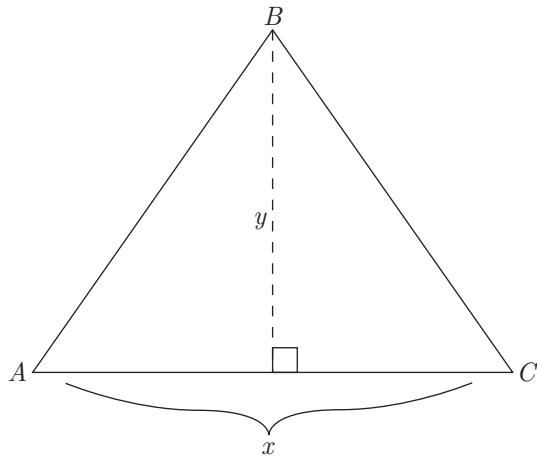
SECTION 4: QUANTITATIVE REASONING

12 of 20

$$(\sqrt{5} - \sqrt{3})^2 =$$

- $2 - 2\sqrt{15}$
- $2 - \sqrt{15}$
- $8 - 2\sqrt{15}$
- 2
- $8 - 2\sqrt{5}$

13 of 20

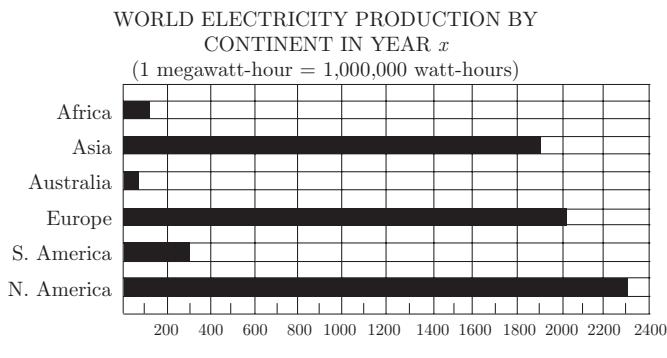


$\triangle ABC$ has an area of 108 cm^2 . If both x and y are integers, which of the following could be the value of x ?

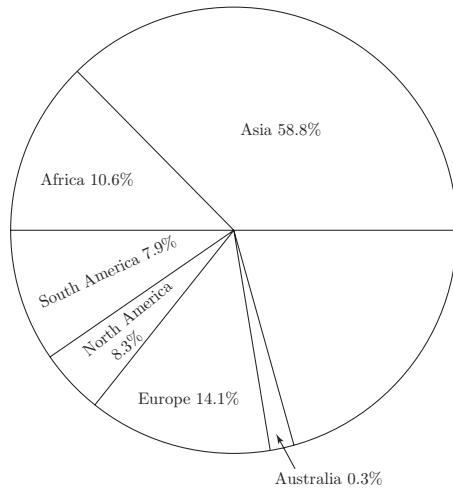
Indicate all such values.

- 4
- 5
- 6
- 8
- 9

Questions 14 through 16 refer to the following graphs.



DISTRIBUTION OF WORLD POPULATION BY CONTINENT IN YEAR x



14 of 20

In Year x , on which continent did electricity production most closely equal electricity production in Europe?

- Africa
- Asia
- Australia
- South America
- North America

SECTION 4: QUANTITATIVE REASONING

15 of 20

In Year x , for which continent was the ratio of electricity production to percent of population the greatest?

- Africa
- Asia
- South America
- Europe
- North America

16 of 20

In Year x , if South America had a population of approximately 368 million, what was the approximate population, in millions, of Africa?

- 494
- 470
- 274
- 150
- 39

17 of 20

The average (arithmetic mean) weight of 5 crates is 250 pounds. The 2 lightest crates weigh between 200 and 205 pounds each, inclusive, and the 2 heaviest crates weigh between 300 and 310 pounds each, inclusive. If the weight of the fifth crate is x pounds, then x is expressed by which of the following?

- $220 \leq x \leq 250$
- $230 \leq x \leq 260$
- $240 \leq x \leq 270$
- $250 \leq x \leq 270$
- $260 \leq x \leq 280$

18 of 20

A mathematician has devised a formula that produces a series of numbers s_1, s_2, \dots, s_x according to the principles $s_1 = 2$, $s_2 = 2$, $s_3 = 2$, and for $x \geq 4$, $s_x = 2s_{x-1} + s_{x-2}$. Which of the following equals s_6 ?

- 30
- 34
- 37
- 38
- 40

19 of 20

Y is a point on line segment XZ such that

$XY = \frac{1}{2}XZ$. If the length of YZ is $4a + 6$, and the length of XZ is 68, then $a =$

Click on the answer box and type in a number.
Backspace to erase.

20 of 20

Talk show host Ralph Burke has exactly one guest on his show each day, and Burke's show airs every Monday through Friday. Burke always schedules politicians on Mondays and Wednesdays, actors on Tuesdays and athletes on Thursdays, but can have a guest of any one of these three kinds on Friday. No guest appears more than once per week on Burke's show. If Burke has five politicians, three actors and six athletes he could invite, and if no politician is also an actor or an athlete and no actor is also an athlete, how many different schedules of guests from Monday to Friday could Burke create?

- 30
- 1,200
- 3,600
- 4,500
- 6,300

SECTION 5: VERBAL REASONING

For questions 1 through 6, select one entry for each blank from the corresponding column of choices. Fill all blanks in the way that best completes the text.

1 of 20

Despite what _____ philosophies of child-rearing suggest, there is no imperative that the day-to-day action of raising a child be simple, unambiguous, and unchanging—no requirement, in other words, ensures that life follows philosophy.

inexact
aggressive
random
shameless
systematic

2 of 20

All the greatest chess players in the world know that it is folly to be (i) _____ when facing a formidable opponent, as stubbornness will almost surely lead to mistakes that force a player to (ii) _____ to the prevailing strategy of their opponent.

Blank (i)	Blank (ii)
finicky	capitulate
obdurate	dissent
vituperative	repudiate

3 of 20

The novel emphasizes the innate (i) _____ of all humans, showing how each and every character within the narrative is, ultimately, (ii) _____. This motif becomes tiresome due to its (iii) _____, however, as character after character is bribed, either explicitly or implicitly, into giving up his or her supposedly cherished beliefs.

Blank (i)	Blank (ii)	Blank (iii)
zealousness	adroit	redundancy
corruptibility	cunning	triviality
optimism	venal	subtlety

4 of 20

Although pirating software, such as borrowing a friend's copy of an installation CD or downloading software from unapproved sources is (i) _____, many people continue to do so (ii) _____, almost as if they were unaware that such acts amount to theft.

Blank (i)	Blank (ii)
uncommon	savagely
illegal	sensibly
difficult	unabashedly

5 of 20

Having squandered his life's savings on unprofitable business ventures, the _____ entrepreneur was forced to live in squalor.

former
unlikely
insolvent
perturbed
eccentric

6 of 20

Teachers of composition urge their students to (i) _____ in their writing and instead use clear, simple language. Why use (ii) _____ vocabulary when a (iii) _____ phrasing conveys one's meaning so much more effectively?

Blank (i)	Blank (ii)	Blank (iii)
exscind obloquy	recreant	arcane
eschew obfuscation	redolent	limpid
evince ossification	recondite	droll

SECTION 5: VERBAL REASONING

For each of Questions 7 to 11, select one answer choice unless otherwise instructed.

Questions 7 through 8 are based on the following reading passage.

Neurobiologists have never questioned that axon malfunction plays a role in neurological disorders, but the nature of the relationship has been a matter of speculation. George Bartzokis's neurological research at UCLA suggests that many previously poorly understood disorders such as Alzheimer's disease may be explained by examining the role of the chemical compound myelin.

Myelin is produced by oligodendrocyte cells as a protective sheathing for axons within the nervous system. As humans mature and their neurochemistries grow more complex, oligodendrocyte cells produce increasing amounts of myelin to protect the **byzantine** circuitry inside our nervous systems. An apt comparison may be to the plastic insulation around copper wires. Bereft of myelin, certain areas of the brain may be left vulnerable to short circuiting, resulting in such disorders as ADHD, schizophrenia, and autism.

7 of 20

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

It can be inferred from the passage that the author would be most likely to agree with which of the following statements regarding the role of myelin?

- The levels of myelin in the brain can contribute to the neurological health of individuals.
- Increasing the levels of myelin in the brain can reverse the effects of neurological damage.
- The levels of myelin in the brain are not fixed throughout the lifetime of an individual.

8 of 20

In the context in which it appears, **byzantine** most nearly means

- devious
- intricate
- mature
- beautiful
- electronic

9 of 20

The cost of operating many small college administrative offices is significantly reduced when the college replaces its heavily compensated administrative assistants with part-time work-study students whose earnings are partially subsidized by the government. Therefore, large universities should follow suit, as they will see greater financial benefits than do small colleges.

In the above argument it is assumed that

- replacing administrative assistants with work-study students is more cost-effective for small colleges than for large universities
- large universities usually depend upon small colleges for development of money-saving strategies
- the financial gains realized by large universities would not be as great were they to use non-work-study students in place of the administrative assistants
- work-study students at large universities could feasibly fulfill a similar or greater proportion of administrative assistant jobs than what they could at small colleges
- the smaller the college or university, the easier it is for that college or university to control costs

SECTION 5: VERBAL REASONING

Questions 10 through 11 are based on the following reading passage.

The nineteenth century marked a revolutionary change in the way wealth was perceived in England. As landed wealth gave way to monied wealth, investments became increasingly speculative.

A popular investment vehicle was the three-percent consol which took its name from the fact that it paid three pounds on a hundred pound investment. The drawback to the consol was that once issued, there was no easy way for the government to buy back the debt. To address the problem, the British government instituted a sinking fund, using tax revenue to buy back the bonds in the open market. The fact that the consol had no fixed maturity date ensured that any change in interest rate was fully reflected in the capital value of the bond. The often wild fluctuation of interest rates ensured the consol's popularity with speculative traders.

10 of 20

Which of the following best describes the relationship of the first paragraph of the passage to the passage as a whole?

- It provides a generalization which is later supported in the passage.
- It provides an antithesis to the author's main argument.
- It briefly compares two different investment strategies.
- It explains an investment vehicle that is later examined in greater detail.
- It provides a historical framework by which the nature of the nineteenth-century investor can more easily be understood.

11 of 20

In the second paragraph, select the sentence that describes a solution to a problem.

For questions 12 through 15, select the two answer choices that, when used to complete the sentence, fit the meaning of the sentence as a whole and produce completed sentences that are alike in meaning.

12 of 20

Owing to a combination of its proximity and _____ atmosphere, Mars is the only planet in our solar system whose surface details can be discerned from Earth.

- viscous
- ossified
- rarefied
- estimable
- copious
- meager

13 of 20

Using the hardships of the Joad family as a model, John Steinbeck's *The Grapes of Wrath* effectively demonstrated how one clan's struggles epitomized the _____ experienced by an entire country.

- reticence
- adversity
- repudiation
- quiescence
- verisimilitude
- tribulation

SECTION 5: VERBAL REASONING

14 of 20

The Mayan pyramid of Kukulkan is more than just _____ edifice; this imposing structure was built to create a chirping echo whenever people clap their hands on the staircase. This echo sounds just like the chirp of the Quetzal, a bird which is sacred in the Mayan culture.

- a venerable
- a humble
- a beguiling
- an august
- a specious
- a prosaic

15 of 20

Some wealthy city-dwellers become enchanted with the prospect of trading their hectic schedules for a bucolic life in the countryside, and they buy property with a pleasant view of farmland—only to find the stench of the livestock so _____ that they move back to the city.

- bovine
- pastoral
- noisome
- atavistic
- olfactory
- mephitic

For each of Questions 16 to 20, select one answer choice unless otherwise instructed.

Questions 16 through 18 are based on the following reading passage.

Often the most influential developments initially appear to be of minor significance. Consider the development of the basic stirrup for example. Without stirrups horse and rider are, in terms of force, separate entities; lances can be used from horseback, but only by throwing or stabbing, and mounted warriors gain only height and mobility. In medieval times, A lance couched under the rider's arm, unifying the force of rider and weapon, would throw its wielder backwards off the horse at impact. Stirrups unify lance, rider, and horse into a force capable of unprecedented violence. This development left unusually clear archaeological markers: With lethality assured, lances evolved barbs meant to slow progress after impact, lest the weight of body pull rider from horse. The change presaged the dominance of mounted combat, and increasingly expensive equipment destroyed the venerable ideal of freeman warriors. New technology demanded military aristocracy, and chivalric culture bore its marks for a millennium.

16 of 20

The primary purpose of the passage is to

- discuss the influence of a recent archeological discovery
- explore the societal significance of a technological innovation
- assess the state of research in a given field
- lament the destruction of certain social ideals
- explicate the physics of combat artillery

SECTION 5: VERBAL REASONING

17 of 20

It can be inferred from the passage that the author believes which of the following about innovations in military technology?

- Their study merits additional research.
- They had more lasting influence than did those of the ancient world.
- Most of them had equally far-reaching repercussions.
- Prior to their application, the military value of horses was considered insignificant.
- Many of them are archaeologically ambiguous.

18 of 20

Select the sentence in the passage in which the author cites the physical effects of a technological innovation being discussed as an example of a previous generalization.

Questions 19 through 20 are based on the following reading passage.

Few mathematical constructs seem as conceptually simple as that of randomness. According to the traditional definition, a number is random if it is chosen purely as the result of a probabilistic mechanism such as the roll of a fair die. In their groundbreaking work regarding complexity and the limitations of formal systems, mathematicians Gregory Chaitin and A.N. Kolmogorov force us to consider this last claim more closely.

Consider two possible outcomes of throwing a fair die three times: first, 1, 6, and 2; second 3, 3, and 3. Now let us construct two three-member sets based on the results. Though the first set—{1,6,2}—intuitively seems more random than the second—{3,3,3}, they are each as likely to occur, and thus according to the accepted definition, must be considered equally random. This unwelcome result prompts Chaitin and Kolmogorov to suggest the need for a new standard of randomness, one that relies on the internal coherence of the set as opposed to its origin.

19 of 20

Which of the following best describes the organization of the passage as whole?

- A concept is introduced; a traditional definition is put forward; a thought experiment is described; a new definition is proposed; the traditional definition is amended as a result.
- A concept is introduced; a traditional definition is supported by authorities; a thought experiment is described; the implications of the experiment are discussed.
- A concept is introduced; a traditional definition is considered and rejected; a thought experiment is described; a new definition is proposed.
- A concept is introduced; a traditional definition is called into question; a thought experiment is described; the implications of the experiment are discussed.
- A concept is introduced; authorities are called in to reevaluate a definition; a thought experiment is described; the implications of the experiment are considered and rejected.

20 of 20

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

Which of the following is an inference made in the passage above?

- The results of the same probabilistic mechanism will each be as likely as the other to occur.
- According to the traditional definition of randomness, two numbers should be considered equally random if they result from the same probabilistic mechanism.
- Different probabilistic mechanisms are likely to result in similar outcomes.

NO TEST MATERIAL ON THIS PAGE

SECTION 6: QUANTITATIVE REASONING

For each of Questions 1 to 7, compare Quantity A and Quantity B, using additional information centered above the two quantities if such information is given. Select one of the following four answer choices and fill in the corresponding circle to the right of the question.

- (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.

1 of 20

$$\frac{x}{6} + 2 = \frac{6}{2}$$

$$\frac{y}{3} + 2 = \frac{9}{3}$$

Quantity A

$$\frac{(x-1)}{y}$$

Quantity B

$$\frac{(y-1)}{x}$$

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

2 of 20

Quantity A

The distance that Bob drives in 3 hours at an average speed of 44 miles per hour

Quantity B

The distance that Inez drives in 2 hours and 30 minutes at an average speed of 50 miles per hour

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

3 of 20

The height of a rectangular 3D figure is increased by p percent, its depth is decreased by p percent and its width is unchanged.

Quantity A

The volume of the new 3D figure if $p = 20$

Quantity B

The volume of the new 3D figure if $p = 40$

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

4 of 20

In ΔABC , $AB = AC$

Quantity A

The sum of the degree measures of angle B and angle C

Quantity B

90

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

5 of 20

12.5 percent of k is 80.
 k is y percent of 80.

Quantity A

y

Quantity B

650

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

SECTION 6: QUANTITATIVE REASONING

6 of 20

Set $P = \{a, b, c, d, e, f, g\}$

Set $Q = \{a, b, c, d, e, f\}$

a, b, c, d, e, f , and g are distinct integers

Quantity A

Range of Set P

Quantity B

Range of Set Q

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

7 of 20

Series F is defined as $F_n = F_{(n-1)} + 3$ and $F_1 = 10$.

Quantity A

The sum of F_4 through F_{10}

Quantity B

The sum of F_6 through F_{11}

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

8 of 20

A number, n , is multiplied by 6. The product is increased by 24. Finally, the entire quantity is divided by 3. Which of the following expresses the final result in terms of n ?

$\frac{n}{3} + 8$

$\frac{n+24}{2}$

$2n + 8$

$3n + 24$

$16n$

9 of 20

The average (arithmetic mean) of a and b is 10, and the average of c and d is 7. If the average of a, b , and c is 8, what is the value of d ?

Click on the answer box and type in a number.
Backspace to erase.

10 of 20

In the coordinate plane, square $ABCD$ has vertices at $A (3, 7)$, $B (3, 12)$, $C (8, x)$, $D (8, y)$. What is the area of $ABCD$?

16

20

25

30

36

11 of 20

Houses Sold in July		
Week	Peter	Dylan
Week 1	4	9
Week 2	6	3
Week 3	10	10
Week 4	4	2

The table above shows the number of houses sold per week for the month of July by two real estate agents, Peter and Dylan. What is the difference between the median number of houses sold per week by Dylan and the median number of houses sold per week by Peter?

0

1

2

5

6

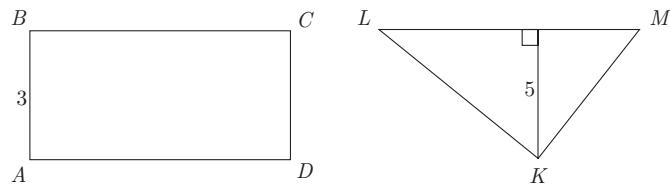
SECTION 6: QUANTITATIVE REASONING

12 of 20

At Flo's Pancake House, pancakes can be ordered with any of six possible toppings. If no toppings were repeated, how many different ways are there to order pancakes with three toppings?

- 20
- 40
- 54
- 120
- 720

13 of 20

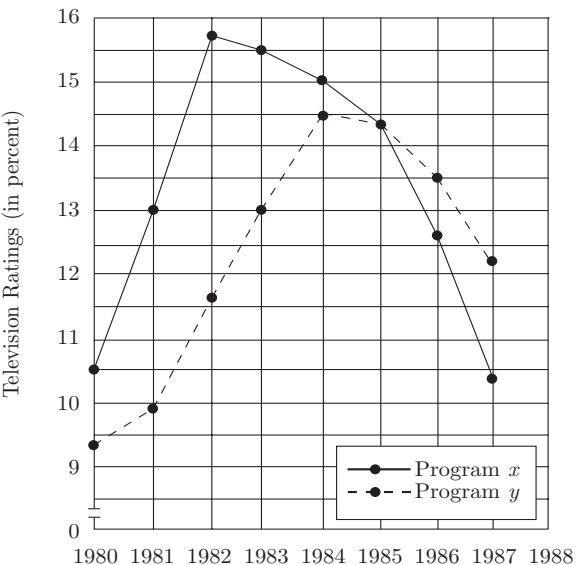


The area of triangle KLM is equal to the area of rectangle $ABCD$. If the perimeter of $ABCD$ is 16, what is the length of LM ?

- $\frac{3}{2}$
- 3
- $\frac{16}{5}$
- 5
- 6

Questions 14 through 16 refer to the following graph.

TELEVISION RATINGS* IN THE UNITED STATES
1980–1987



*Ratings equal the percent of television households in the United States that viewed the program.

Note: Figure drawn to scale

14 of 20

For how many of the years shown did the ratings for Program y increase over the ratings for Program y the previous year?

- Two
- Three
- Four
- Five
- Six

SECTION 6: QUANTITATIVE REASONING

15 of 20

In 1995 there were 95 million television households in the United States. If, in 1983, there were 80 percent of the number of television households in 1995, then approximately how many television households, in millions, viewed Program y in 1983?

- 80
- 76
- 15
- 12
- 10

16 of 20

If there were 20 million television households in the United States in 1983, then the number of viewers of Program x is what percent greater than the number of viewers of Program y in 1983? (Ignore the percent sign when entering the answer).

Click on the answer box and type in a number.
Backspace to erase.

17 of 20

Each of the 576 houses in Tenantville is owned by one of the following landlords: Matt, Gavin, Angela, or Susan. Matt and Angela together own twice as many houses as Gavin and Susan own. If Gavin owns 100 more houses than Susan owns, and Matt owns 100 more houses than Angela owns, how many houses does Susan own?

- 46
- 142
- 146
- 192
- 242

18 of 20

One-quarter of the cars that an automobile manufacturer produces are sports cars, and the rest are sedans. If one-fifth of the cars that the manufacturer produces are red and one-third of the sports cars are red, then what fraction of the sedans is red?

<input type="text"/>
<input type="text"/>

Click on each box and type in a number.
Backspace to erase.

19 of 20

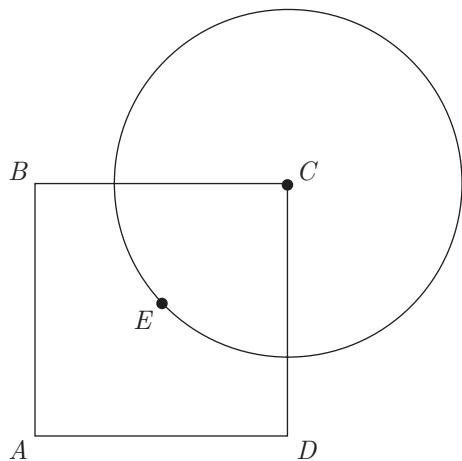
A candy jar has 4 lime, 10 cherry, 8 orange, and x grape candies. If Tom selects a candy from the jar at random and the probability that he selects an orange candy is greater than 20 percent, which of the following could be the value of x ?

Indicate all such values.

- 10
- 14
- 18
- 22
- 24
- 28

SECTION 6: QUANTITATIVE REASONING

20 of 20



Square $ABCD$ and a circle with center C intersect as shown. If point E is at the center of $ABCD$ and if the radius of circle C is k , then what is the area of $ABCD$, in terms of k ?

- $\frac{k^2}{2\pi}$
- $\frac{\pi k^2}{2}$
- πk^2
- k^2
- $2k^2$



answer sheet

Section 2: Verbal Reasoning

1. A B C D E 11. A B C D E
2. A B C D E F 12. A B C D E
3. A B C D E F 13. A B C
4. A B C D E F G H I 14. A B C
5. A B C 15. A B C D E
6. A B C D E
7. A B C D E
8. A B C
9. A B C D E
10. A B C D E

Section 3: Verbal Reasoning

1. A B C D E 11. A B C D E
2. A B C D E 12. A B C D E
3. A B C D E F 13. A B C D E F
4. A B C D E F G H I 14. A B C D E F
5. A B C D E F G H I 15. A B C D E F
6. A B C D E
7. A B C
8. A B C D E
9. A B C
10. A B C D E

Section 4: Quantitative Reasoning

1. A B C D 11. A B C D E F G H
2. A B C D 12. A B C D E
3. A B C D 13. A B C D E
4. A B C D 14. A B C D E
5. A B C D 15. A B C D E F G H
6. A B C D
7. A B C D
8. A B C D
9. A B C D E
10. A B C D E
16. A B C D E
17. A B C D E
18. A B C D E
19.
20.

**Section 5: Quantitative Reasoning**

- | | | |
|---------------|--------------------------|--|
| 1. A B C D | 11. A B C D E | 16. A B C D E |
| 2. A B C D | 12. A B C D E | 17. A B C D E |
| 3. A B C D | 13. <input type="text"/> | 18. A B C D E F G H |
| 4. A B C D | 14. A B C D E | 19. A B C D E F |
| 5. A B C D | 15. A B C D E | 20. <input type="text"/>
<hr/> <input type="text"/> |
| 6. A B C D | | |
| 7. A B C D | | |
| 8. A B C D | | |
| 9. A B C D E | | |
| 10. A B C D E | | |

SECTION 1: ANALYTICAL WRITING

Analyze an Issue

30 minutes

The time for this task is 30 minutes. You must plan and draft a response that evaluates the issue given below. If you do not respond to the specific issue, your score will be zero. Your response must be based on the accompanying instructions and you must provide evidence for your position. You may use support from reading, experience, observations, and/or course work.

High schools should eliminate their art and music programs to make room for more extensive studies in mathematics and English. Test scores in mathematics and English are of paramount interest to the colleges most students wish to attend, while art and music classes are mere electives of little use to students who do not intend to pursue careers in such creative fields.

Write a response that expresses the degree to which you agree or disagree with the claim and the reason or reasons that underlie the claim.

Your response will be read by experienced readers who will assess your ability to:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

diagnostic test

Analyze an Argument**30 minutes**

The time for this task is 30 minutes. You must plan and draft a response that evaluates the argument given below. If you do not respond to the given argument, your score will be zero. Your response must be based on the accompanying instructions, and you must provide evidence in support of your analysis.

You should not present your views on the subject of the argument, but on the strength or weakness of the argument.

Skybold and Associates has seen a remarkable surge in productivity since it instituted its policy of allowing its creative staff to work from home for as many as two workdays (16 hours) per week. Results of this policy have included employees taking fewer sick and personal days as well as greater employee satisfaction and enhanced employee loyalty. In addition, Skybold envisions in the not so distant future a reduced need for office space as fewer offices and cubicles will be needed to accommodate a smaller in-house staff. This will result in dramatic savings for the company. Skybold's new telecommunicating policy is clearly a win-win situation.

Write a response that identifies questions to be answered before deciding whether the conclusion and the argument on which it is based are reasonable. Explain how the answers would help you determine whether the argument's conclusion is logical.

Your response will be read by experienced readers who will assess your ability to:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based version of the GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

INSTRUCTIONS FOR THE VERBAL REASONING AND QUANTITATIVE REASONING SECTIONS

You will find information here on the question formats for the Verbal Reasoning and Quantitative Reasoning sections, as well as information about how to use the software program, or, if you're taking the paper-based version, how to mark your answers in the answer booklet.

Perhaps the most important information is a reminder about how these two sections are scored. Every correct answer earns a point, but points are not subtracted for incorrect answers. The advice from ETS is to guess if you aren't sure of an answer. ETS says that this is better than not answering a question.

All multiple-choice questions on the computer-based test will have answer options preceded by either blank ovals or blank squares, depending on the question type. The paper-based test will follow the same format for answer choices, but use letters instead of ovals or squares for answer choices.

For your convenience in answering questions and checking answers in this book, we use A, B, C, etc. By using letters, you will find it easy to check your answers against the answer key and explanation sections.

diagnostic test

SECTION 2: VERBAL REASONING

30 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 35 minutes.)

For each question, follow the specific directions and choose the best answer.

For Questions 1–4, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. Russian author Leo Tolstoy wrote *War and Peace* from an _____ point of view because he wanted to convey what each of his characters was thinking and feeling.

A. accomplished
B. enormous
C. ensemble
D. omniscient
E. acrimonious

2. That Jane Austen's satiric wit is lost on some readers is (i) _____ because it is so (ii) _____ as to become caricature; for example, consider the Rev. Collins in *Pride and Prejudice*.

Blank (i)	Blank (ii)
A. logical	D. flashy
B. understandable	E. showy
C. inexplicable	F. overdrawn

3. One of the most (i) _____ and respected members of our community is giving a speech about some (ii) _____ issues affecting our local government at the town hall meeting this Friday.

Blank (i)	Blank (ii)
A. malevolent	D. crucial
B. eminent	E. incandescent
C. marginal	F. heterogeneous

4. One consequence of the desire among modern playwrights to bring (i) _____ to the theater has been the diminution of poetry as a dramatic language. On the other hand, realism in language has brought a (ii) _____ end to rant and rhetoric upon the stage. As one critic wrote, modern playwrights have been pushed to develop plays that are (iii) _____ and convincing when they could no longer rely on “verbal pyrotechnics.”

Blank (i)

A. vibrancy
B. verisimilitude
C. resemblance

Blank (ii)

D. welcome
E. final
F. limited

Blank (iii)

G. more forceful
H. more cerebral
I. more believable

For Questions 5–20, choose only one answer choice unless otherwise indicated.

Questions 5–7 are based on the following passage.

The *New York Times* has boldly declared the end of the car culture in the United States. It based its claim on a few salient facts. The number of miles driven dropped steadily between 2005 and 2013. Over an even more extended period, rates of automobile ownership declined. Line The *Times* also charted changing attitudes toward driving and car ownership by young people, 5 quoting one study that showed a 23-percent decrease in driving among young people. Car sharing, bikes, and public transit were among the reasons cited for this decrease.

But is the automobility of American culture actually over, or is it just in the slow lane? It is true that the era of massive road building projects not only seems to be over, but also actually peaked as long ago as 1980. It is also true that environmental and social factors, as well as 10 the overcrowding of our roads and highways, are shaping new attitudes across all segments of society. During the past two decades, public transportation use has grown at a far faster rate than the population. Another significant factor in the declining number of miles driven has to do with our aging population; over many years, the number of miles driven has been shown to decline by age 45. Vehicle costs as a percentage of income have also been rising 15 since the mid-90s. While all of these data do not prove the end of cars, they may point to the end of the driving boom that characterized twentieth-century America.

For Question 5, consider each answer individually and choose all that apply.

5. The passage suggests that the decline in driving is authenticated by which of the following?
- A. A 23-percent decline in car ownership among young people
 - B. The end of the era of massive road building projects
 - C. The steady drop in the number of miles driven

diagnostic test

6. It can be inferred from the passage that the author most likely thinks that the *Times* writer used the term “the end of car culture” because it
- offered the clearest wording to contradict the phrase “automobility of American culture.”
 - generalized the facts about U.S. driving trends in the most succinct and appropriate way.
 - created a new and appropriate catchphrase for referring to changes in driving.
 - summarized a number of recent studies and elucidated their results accurately.
 - reflected some current data and employed enough hyperbole to create interest.
7. In the second paragraph, the author is primarily concerned with
- mitigating the *Times*’s assertion that car culture is at an end.
 - explaining why the number of miles driven has declined recently.
 - presenting reasons for a changing demographic of car ownership.
 - disputing the claim that car ownership is in significant decline.
 - offering further proof for the *Times*’s claim that the car culture is over.

Questions 8–9 are based on the following passage.

Obesity results when a person consumes significantly more calories than energy burned over a long period of time, though at this point scientists cannot point to a single cause of obesity. In a large majority of obesity cases, the causes are related to genetic factors that influence the metabolism of fat and that regulate the hormones and proteins that control appetite. A person’s appetite is determined by different processes that occur both in the brain and the digestive system. **During digestion, carbohydrates break down into different types of sugar molecules, including glucose.** Immediately after eating, blood glucose levels rise, which triggers the release of insulin, a hormone that helps change glucose into energy. As the insulin pours into the bloodstream, it pushes the glucose into cells. Insulin is a significant factor in terms of obesity because it helps determine which nutrients will be burned for energy and which will be stored in cells for future use. Recent studies have found that the faster a cell processes insulin, the more fat it stores. This might be one cause of obesity, though there may be other factors to consider, and to date no one theory has been determined to be conclusive.

8. What function might a medication perform to decrease the obesity of the user?
- It could help the user process insulin more quickly.
 - It could cause the user to produce more insulin.
 - It could slow the rate at which cells process insulin.

9. Which of the following best characterizes the function of the boldfaced sentence in lines 6–7 of the passage?
- A. It provides evidence on which a theory is based.
 - B. It summarizes a theory with which the author agrees.
 - C. It restates a point made earlier in the passage.
 - D. It disproves a commonly accepted theory.
 - E. It presents a specific application of a general concept.

Questions 10–12 are based on the following passage.

Dutch artist M.C. Escher's work covers a variety of subjects, though he is probably best known for the pieces that he drew from unusual perspectives, which result in enigmatic effects. During the course of his life, Escher adopted a highly mathematical approach, using special notations that he invented himself, including a system for categorizing shapes, colors, and symmetrical properties. Looking at his work, you can see clearly that mathematics played an important role in the development of his distinctive style, yet though he studied and admired various mathematical theories over the years, Escher did not consider himself a mathematician. However, this lack of formal training allowed him to explore mathematics in a unique way, without having to adhere to any set rules or restrictions. In 1958, he wrote: “In mathematical quarters, the regular division of the plane has been considered theoretically . . . [Mathematicians] have opened the gate leading to an extensive domain, but they have not entered this domain themselves. By their very nature they are more interested in the way in which the gate is opened than in the garden lying behind it.”

For Question 10, consider each answer individually and choose all that apply.

10. The passage suggests that the enigmatic effects of M.C. Escher's work are caused by which of the following?
- A. The fact that Escher's work covers a variety of subjects.
 - B. Escher's decision to draw rather than paint his work.
 - C. The mathematical approach Escher took to his work.
 - D. The way Escher used a system to categorize his shapes.
 - E. The unusual perspectives Escher used in his work.

diagnostic test

11. From the passage, what is Escher's view of mathematicians?
- A. They do not grasp how mathematics and art are interconnected.
 - B. They will never have the ability to appreciate Escher's art.
 - C. They cannot translate their theories into their own personalized notations.
 - D. They will never be able to translate their theories into art.
 - E. They cannot see the beauty that is inherent in their theories.
12. In the passage, "distinctive" (line 6) means
- A. disturbing.
 - B. honorable.
 - C. characteristic.
 - D. maladjusted.
 - E. macabre.

Questions 13–15 are based on the following passage.

The fire at the Triangle Shirtwaist Factory in New York City in 1911 was one of the worst industrial disasters in U.S. history. The fire killed 146 people, many of them young immigrant women. The Triangle Shirtwaist Factory produced women's blouses, or "shirtwaists," and took up the eighth, ninth, and tenth floors of a building in New York's Greenwich Village.

Line 5 The fire started near closing time on March 25, 1911, on the eighth floor of the building. Most of the workers could not escape because the supervisors had locked the doors to the stairwells and exits from the outside to prevent the workers from leaving early or removing materials. Many women died from being trapped inside the building or jumped to their deaths from the top floors because ladders could not reach them. This devastating tragedy
10 brought to light for many Americans the inhumane working conditions of sweatshops and it had a huge impact on U.S. workers. It galvanized many to push for improved factory safety standards and led to the rapid growth of the International Ladies' Garment Workers' Union, which fought for better and safer working conditions in the garment industry. New York State created a commission to investigate factory conditions and in 1915 the state legislature
15 enacted new measures to protect factory workers from just such tragedies as the Triangle Shirtwaist Factory fire.

diagnostic test

For Questions 13–14, consider each answer individually and choose all that apply.

13. According to the passage, what was it about the Triangle Shirtwaist fire that evidently caused so great an impact on public opinion?
- A. The fire killed so many people, many of whom were young women.
 - B. The workers could not escape during the fire because supervisors had locked the doors to the stairwells and exits.
 - C. The fire resulted in a strengthened labor movement and new labor laws.
14. Select the sentence in the passage that does NOT add to the support for the main idea of the passage.
- A. This devastating tragedy brought to light for many Americans the inhumane working conditions of sweatshops and it had a huge impact on U.S. workers.
 - B. The fire started near closing time on March 25, 1911, on the eighth floor of the building.
 - C. Many women died from being trapped inside the building or jumped to their deaths from the top floors because ladders could not reach them.
15. In the passage, “galvanized” (line 11) most nearly means
- A. impeded.
 - B. increased.
 - C. hurtled.
 - D. angered.
 - E. incited.

For Questions 16–19, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

16. In shuttering programs to reduce costs, the new CFO was _____ toward employees and refused to listen to their concerns and alternative suggestions.
- A. arrogant
 - B. unkind
 - C. uncharitable
 - D. dismissive
 - E. contentious
 - F. confrontational

17. Green building, that is, the construction of new buildings and the renovation of existing ones to make them eco-friendly, is a fast-growing segment of the construction industry and one that ALLIED Builders hopes to _____ according to its five-year business plan.
- A. promote
B. advance
C. capitalize on
D. upgrade
E. exploit
F. endorse
18. The original intention in creating NASA was to explore space, but many of the products people take for granted today, such as cordless power tools and sunglasses with polarized lenses, resulted from _____ research that NASA conducted for the space program.
- A. far-reaching
B. wide-ranging
C. innovative
D. unusual
E. cutting-edge
F. conventional
19. Many researchers believe that _____ bacteria keep harmful bacteria from invading humans by using the material that harmful bacteria need to live.
- A. helpful
B. malignant
C. pathogenic
D. benign
E. benevolent
F. beneficial

Question 20 is based on the following passage.

Emily Dickinson, a poet virtually unknown in her lifetime, wrote some of the most memorable lines in American poetry. Her poems are instantly recognizable for their brevity (they are often no longer than 20 lines) and their quirky punctuation and capitalization. Her frequent and often idiosyncratic use of the dash serves to emphasize many of her recurrent topics. A great number of Dickinson's almost 1,800 poems deal with the themes of death and immortality, though her poems are also filled with joy and hope. Because of its unusual syntax and use of figurative language—imagery, metaphor, personification—Dickinson's poetry can seem to the uninitiated reader something of a puzzle. Present-day readers would do well to renounce a literal way of reading in order to truly appreciate Dickinson's poetry.

20. What does the author imply by the last statement in the passage?
- A. Readers should not try to find literal meaning in Dickinson's poetry.
 - B. Readers of poetry today are not used to so much figurative language.
 - C. Readers should try to figure out what themes were most important to Dickinson.
 - D. Readers who try to unlock the mysteries of Dickinson's figurative language are doing themselves a disservice.
 - E. Readers of poetry today need to consider the context in which Dickinson's poetry was written.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

SECTION 3: VERBAL REASONING

30 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 35 minutes.)

For each question, follow the specific directions and choose the best answer.

For Questions 1–5, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. Social networking is a marketing tool that many companies are harnessing to sell their products; however, it must be used _____ because the hard sell risks offending potential customers.

A. with ease
B. actively
C. judiciously
D. expeditiously
E. efficiently

2. My dog Candy's lethargic behavior was initially _____, but it made sense after I took her to the veterinarian and learned that Candy is pregnant.

A. unambiguous
B. ineluctable
C. circumspect
D. cantankerous
E. inexplicable

3. Garraty states that the problems faced by private colleges in the 1820s and 1830s were of their own making to a degree. Many cities and towns wanted the (i) _____ of hosting a college, but the supply of colleges soon (ii) _____ the demand, that is, the number of potential students.

Blank (i)

A. honor
B. admiration
C. character

Blank (ii)

D. outperformed
E. outstripped
F. outshone

4. Because the queen is in ____ (i) health, the prince might have to ____ (ii) the role of king if his mother's health forces her to ____ (iii) the throne.

Blank (i)

- A. robust
B. feeble
C. cautionary

Blank (ii)

- D. convey
E. assume
F. furnish

Blank (iii)

- G. abdicate
H. nullify
I. arbitrate

5. To ____ (i) with the ____ (ii) of questions that greeted her vague comment during the lecture, the professor restated her comment to ____ (iii) her intent.

Blank (i)

- A. amalgamate
B. orient
C. contend

Blank (ii)

- D. onslaught
E. paucity
F. compilation

Blank (iii)

- G. elucidate
H. obfuscate
I. categorize

For Questions 6–20, choose only one answer choice unless otherwise indicated.

Questions 6–7 are based on the following passage.

Access to clean drinking water and sanitation systems are crucial global goals. This access constitutes a fundamental health and human dignity issue. Expanding sewage systems will also reduce contamination of soil, rivers, and oceans, thereby promoting biodiversity and *Line* decreasing land degradation. Furthermore, access to clean water will reduce geopolitical 5 conflict centered on water rights. In addition, commitment to clean water goals promotes investment in new technologies, such as desalination and water reuse.

Even though the United Nations reported that between 1990 and 2010, more than “2 billion people gained access to improved water sources, and 1.8 billion gained access to improved sanitation,” a more recent global assessment warns that significant problems continue to plague the world. Despite well-coordinated global initiatives, the latest U.N. report 10 discusses factors that slow the progress toward clean water goals. These include the failure of some countries to set national hygiene standards, inadequate funding or poor absorption of existing funding, lack of skilled labor to implement change, and lack of political will. Only 80% of nations recognize the right to water; only some 50% recognize the right to sanitation.

diagnostic test

6. Based on the passage, which of the following is NOT a factor that is delaying progress toward clean water goals?
- A. Failure of some nations to set national hygiene standards
 - B. Inability to manage skilled labor resources at water sites
 - C. Inadequate funding for global water initiatives
 - D. Failure to properly use all available water funding
 - E. Reluctance of some nations to consider water as a right

For Question 7, consider each answer individually and choose all that apply.

7. Select the sentence in the passage that is NOT a supporting detail for a central idea.
- A. This access constitutes a fundamental health and human dignity issue.
 - B. Expanding sewage systems will also reduce contamination of soil, rivers, and oceans, thereby promoting biodiversity and decreasing land degradation.
 - C. Despite well-coordinated global initiatives, the latest U.N. report discusses factors that slow the progress toward clean water goals.

Questions 8–9 are based on the following passage.

During World War II, the U.S. system of rationing did not work as planned not only because it conflicted with personal needs and wants (which had grown during the previous years of deprivation because of the Great Depression and its aftermath), but because it went *Line* against the national character of the American people. This was a nation based on the principle *5* that as long as you have money to spend, nothing is off limits. By limiting each individual's purchasing power, the government had imposed a new economic system that attacked this principle. The emergence of the illegal black market, on the other hand, supported this basic principle of acquisition, or consumerism, for Americans. This is not to deny that many who ran or even patronized the black market were actually motivated by greed, but it does suggest *10* that the individualistic (and frontier) spirit of Americans had not been lost.

8. Select the statement that restates the premise of the author's argument.
- A. Normally law-abiding citizens will break the law to satisfy what they consider to be their basic needs and wants.
 - B. Americans during World War II acted unlawfully due to circumstances out of their control.
 - C. The American system of rationing did not work because Americans circumvented its principles through the practice of the black market.
 - D. As long as Americans have enough money to spend, they will spend it however they can.
 - E. If the Great Depression had not deprived so many Americans of basic needs and wants, they would not have patronized the black market during World War II.

diagnostic test

For Question 9, consider each answer individually and choose all that apply.

9. Which of the following, if it were true, would weaken the author's argument?
- A. During the Great Depression, many Americans found ways to circumvent the law in order to provide for their families.
 - B. The majority of American citizens are law abiding and will not break the law under any circumstances.
 - C. Many Americans continued to patronize the black market after rationing ended.

Questions 10–12 are based on the following passage.

The increasing awareness of lighting inefficiency and the billions of dollars of potential annual energy savings that can be achieved by switching to LED lighting has resulted in many government-funded research initiatives around the world. In addition, governments in the United States, Canada, Europe, and Australia have responded to the growing need for energy conservation by passing legislation that regulates or eliminates the sale of incandescent and halogen light bulbs by a certain date. However, though increasing consumers' awareness of the inefficiency of other light sources can help increase the adoption of LED lighting, regulations that focus on enforcing energy-efficient lighting are likely to work better. One example is California's Energy Efficiency Standards for Residential and Nonresidential Buildings, or Title 24, that provides a set of mandatory regulations covering all aspects of new building construction. The Residential Lighting section of Title 24 requires that a high-efficiency light source be used in several areas of the home, including the kitchen and bathrooms, and that all outdoor light fixtures must either use energy-efficient bulbs, or must be controlled by light and motion sensors.

10. This passage achieves all of the following purposes EXCEPT:
- A. It implies that LED lighting will become a necessity of the future.
 - B. It explains one way governments are forcing people to switch to LED lighting.
 - C. It cites a regulation that enforces the use of high-efficiency light sources.
 - D. It describes how LED lighting is more energy efficient than incandescent lighting.
 - E. It implies that government-funded research on energy efficiency is essential.
11. The author lists several countries and continents in line 4 in order to
- A. show the places that have been most affected by lighting inefficiency.
 - B. imply that most countries do not take lighting inefficiency seriously enough.
 - C. explain that only a minority of governments believe that lighting inefficiency is a problem.
 - D. prove that legislation to control lighting inefficiency is extremely effective.
 - E. indicate the governments that have taken initiatives to conserve energy.

12. “Mandatory” (line 10) most nearly means

- A. provisional.
- B. permanent.
- C. predetermined.
- D. discretionary.
- E. obligatory.

For Questions 13–15, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

13. If life did exist on other planets, scientists theorize that it would not _____ life on Earth.
For example, depending on the wavelengths of life given off by the plant, plants could be red, yellow, or green.

- A. epitomize
- B. mimic
- C. illustrate
- D. typify
- E. imitate
- F. reflect

14. Scientists believe that unlocking the genome is _____; it will forever change the way we diagnose, treat, and someday even prevent disease.

- A. modernization
- B. reforming
- C. revolutionary
- D. transformative
- E. huge
- F. corrective

15. Most of the dishes served during the feast were underdone or overcooked, but at least the soup was very _____.

- A. thorough
- B. palatable
- C. vehement
- D. edible
- E. baroque

Questions 16–17 are based on the following passage.

Among people who want to make informed choices about what they eat, the issue of whether to buy local or organic food is often debated. The most popular reasons cited for buying organic are to avoid pesticides that harm your health and damage ecosystems, to support a system of agriculture that uses natural fertilizers, and to support more humane animal husbandry practices. The reasons cited for buying local food include supporting the local economy, and also buying food that is fresher, has less packaging, and has fewer “food miles,” or the distance food has to travel from source to end user. It turns out to be a complicated question, one that can sometimes lead to additional questions that must be answered in order to make a choice. Sometimes the questions are personal ones, such as: What food tastes better? But larger questions can arise, too, such as: How do the choices we make about our food affect the planet?

16. What is the author’s opinion about whether to buy organic or local food?

- A. We can never really know which is better.
- B. We should try to answer important questions before trying to make that decision.
- C. We should figure out which food tastes better.
- D. We should try to find other ways to support the local economy.
- E. We should buy the food that has the fewest “food miles.”

17. Which of the following statements does the passage most clearly support?

- A. Buying local or organic food is better than buying food from a big chain supermarket.
- B. Buying organic food does not support the local economy.
- C. The distance food has to travel is an important consideration when deciding where to buy your food.
- D. Animals raised on organic farms are treated more humanely.
- E. Food from local farms may have been sprayed with pesticides.

For Question 18, consider each of the three choices individually and choose all that apply.

18. What function does “the distance food has to travel from source to end user” (lines 6–7) serve in the passage?

- A. It is support for the argument for buying local food.
- B. It defines the term “food miles.”
- C. It is support for the larger question about how food choices affect the planet.

diagnostic test

Questions 19–20 are based on the following passage.

Voter opinion polls are often disparaged because they are seen as inaccurate or misused by network news shows eager to boost ratings. However, those who want to discredit voter opinion polling for elections overlook a few facts. First, the last week or two before an election is notoriously volatile. Voters finally decide whether or not to vote and undecided voters make up their minds about the candidates for whom they will vote. This means that polls taken too far in advance of an election cannot possibly forecast with precision the outcome of that election. Second, exit polls differ from most other types of scientific polling, mainly because dispersed polling places preclude exit pollsters from using normal sampling methods. However, debating whether voter polls are accurate or not misses the point. Voter polls are not intended to forecast winners and losers. They are designed to describe the broad spectrum of public opinion and to elucidate what voters are really thinking and what policies are most important to them. In fact, most of what we know about voter behavior and policy preferences comes from past opinion polls about elections. Understood in this context, we should not dismiss polling outright, but instead consider how to improve polling and to use it to its best advantage.

19. “Elucidate” (line 11) most nearly means

- A. confound.
- B. elevate.
- C. vanquish.
- D. illuminate.
- E. predict.

20. Which of the following expresses the author’s thesis about voter opinion polls?

- A. They can never predict the results of an election.
- B. They can help us get a sense of the general trend in an election.
- C. They can help undecided voters make up their minds.
- D. They are misused by the news media.
- E. They are highly unpredictable.

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP, YOU MAY CHECK
YOUR WORK IN THIS SECTION ONLY.**

SECTION 4: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

The test-maker provides the following information that applies to all questions in the Quantitative Reasoning section of the GRE® General Test:

- All numbers used are real numbers.
- All figures are assumed to lie in a plane unless otherwise indicated.
- Geometric figures, such as lines, circles, triangles, and quadrilaterals, *are not necessarily* drawn to scale. That is, you should *not* assume that quantities such as lengths and angle measures are as they appear in a figure. You should assume, however, that lines shown as straight are actually straight, points on a line are in the order shown, and more generally, all geometric objects are in the relative positions shown. For questions with geometric figures, you should base your answers on geometric reasoning, not on estimating or comparing quantities by sight or by measurement.
- Coordinate systems, such as xy -planes and number lines, *are* drawn to scale. Therefore, you can read, estimate, or compare quantities in such figures by sight or by measurement.
- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.

Quantity A

Quantity B

$$6\frac{7}{8}$$

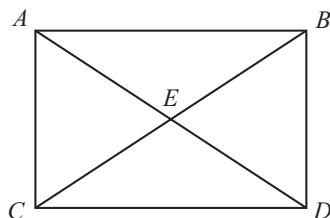
$$3.42(2)$$

- 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.

diagnostic test

Questions 2–4 refer to the diagram below.

2.



$ABCD$ is a rectangle.

E is the intersection of AD and BC .

Quantity A

the area of $\triangle CED$

Quantity B

the area of $\triangle AEC$

- 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.

3.

Quantity A

$m\angle ACD + m\angle CDB$

Quantity B

$m\angle AEC + m\angle CED$

- 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.

4.

Quantity A

$(AB)^2 + (BD)^2$

Quantity B

AD

- 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.

5.

$$y < x < 0$$

Quantity A

$$|x|$$

Quantity B

$$|y|$$

- 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.

6.

Assume a and b are two different integers.Quantity A

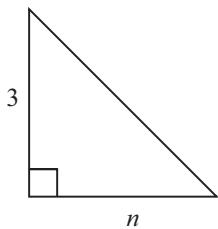
$$(a + b)^2$$

Quantity B

$$(a + b)^3$$

- 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.

7.



The area of the triangle is 15.

Quantity A

$$n$$

Quantity B

$$12$$

- 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.

diagnostic test

8.

$$x^2 = 9$$

Quantity A x Quantity B

-3

- 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.

Questions 9–20 have several formats. Unless the directions state otherwise, choose one answer choice. For Numeric Entry questions, follow the instructions below.

Numeric Entry Questions

The following items are the same for both the computer-based version and the paper-based version of the test. However, those taking the computer-based version will have additional information about entering answers in decimal and fraction boxes on the computer screen. Those taking the paper-based version will have information about entering answers on answer grids.

- Your answer may be an integer, a decimal, or a fraction, and it may be negative.
- If a question asks for a fraction, there will be two boxes. One box will be for the numerator and one will be for the denominator.
- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

9. A grocery store is having a sale on cherries. Usually, the cost is \$6.99 per pound for cherries. This week, the price is 30% less. How much does a customer save if he purchases 2.5 pounds of cherries this week?

- A. \$2.10
B. \$5.25
C. \$4.89
D. \$17.48
E. \$4.20

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diagnostic test

10. A regular, six-sided die is rolled three times. What is the probability that each of the three rolls will produce an odd number?

- A. $\frac{1}{2}$
- B. $\frac{1}{3}$
- C. $\frac{1}{6}$
- D. $\frac{1}{8}$
- E. $\frac{1}{216}$

For Question 11, indicate all the answers that apply.

11. Find the next 3 numbers in the sequence.

1, 1, 2, 3, 5, 8,

- A. 12
- B. 13
- C. 14
- D. 21
- E. 22
- F. 33
- G. 34
- H. 55

12. Let $f(x) = -3x^2(1 - x)$. Find $f(-2)$.

- A. 108
- B. 36
- C. 12
- D. -12
- E. -36

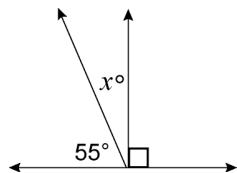
SHOW YOUR WORK HERE

13. Solve for z : $-2(4z - 2) + 3z = 1 - z$

SHOW YOUR WORK HERE

- A. $\frac{3}{4}$
- B. $-\frac{3}{4}$
- C. $\frac{4}{3}$
- D. $-\frac{4}{3}$
- E. $-\frac{5}{6}$

14. Find the value of x .



- A. 55°
- B. 35°
- C. 90°
- D. 145°
- E. 125°

For Question 15, indicate all the answers that apply.

15. Which of the following are factors of 1,200?
- A. 8
 - B. 14
 - C. 15
 - D. 75
 - E. 85
 - F. 160
 - G. 250
 - H. 300

Questions 16–18 are based on the following data.

Annual State Budgets (in millions of dollars)

	2011	2012	2013	2014	2015	2016, est
State A	53.0	75.9	85.5	101.6	131.2	142.1
State B	14.4	14.5	20.0	19.0	39.2	43.5

16. What is the ratio of the total (State A + State B) estimated budget of 2016 to 2011's budget?
- A. 33.7 : 92.8
 - B. 142.1 : 53.0
 - C. 43.5 : 14.4
 - D. 14.4 : 43.5
 - E. 92.8 : 33.7
17. What is the total budget for State A for 2011, 2012, and 2015?
- A. 68.1
 - B. 260.1
 - C. 268
 - D. 276.4
 - E. 308.7
18. What year had the biggest percentage increase from the previous year in State B, and what was the percentage increase?
- A. 2013, 138%
 - B. 2015, 206%
 - C. 2014, 37%
 - D. 2015, 106%
 - E. 2016, 11%

SHOW YOUR WORK HERE

diagnostic test

For Questions 19, enter your answer in the box.

SHOW YOUR WORK HERE

19. Mary went to the convenience store with \$20. She wanted to buy a newspaper for \$1.25, a magazine for \$6.50, a soda for \$1.75, and then spend the rest of her \$20 on dime candy. How many pieces would she get?

20. If p is the greatest prime number that is a factor of 51, and q is the smallest prime number that is a factor of 58, then

$$p + q =$$

- A. 5
- B. 17
- C. 19
- D. 32
- E. 46

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.**

SECTION 5: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

The test-maker provides the following information that applies to all questions in the Quantitative Reasoning section of the GRE® General Test:

- All numbers used are real numbers.
- All figures are assumed to lie in a plane unless otherwise indicated.
- Geometric figures, such as lines, circles, triangles, and quadrilaterals, *are not necessarily* drawn to scale. That is, you should *not* assume that quantities such as lengths and angle measures are as they appear in a figure. You should assume, however, that lines shown as straight are actually straight, points on a line are in the order shown, and more generally, all geometric objects are in the relative positions shown. For questions with geometric figures, you should base your answers on geometric reasoning, not on estimating or comparing quantities by sight or by measurement.
- Coordinate systems, such as xy -planes and number lines, *are* drawn to scale. Therefore, you can read, estimate, or compare quantities in such figures by sight or by measurement.
- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.

Quantity A

0.324875

Quantity B

$\frac{10}{31}$

- 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.

diagnostic test

Part II: Diagnosing Strengths and Weaknesses

2.

Let $0 < x < 1$.Quantity A

$$x^2$$

Quantity B

$$x^3$$

- 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.

3. Mary is twice as old as Stephen. Stephen is 5 years older than Joe. Joe is $\frac{1}{4}$ of Mary's age.
All three were born in the twenty-first century.

Quantity A

Mary's birth year

Quantity B

Joe's birth year

- 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.

4. A try is worth 5 points. A conversion is worth 2 points. A penalty goal is worth 3 points.

Quantity A

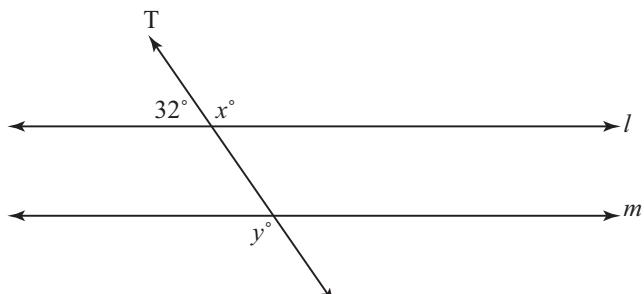
3 tries, 2 conversions, 1 penalty

Quantity B

$$24$$

- 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.

5.



Assume lines l and m are parallel.

Quantity A

x

Quantity B

y

- 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.

6.

Quantity A

$$-\frac{15}{16}$$

Quantity B

$$-\frac{16}{15}$$

- 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.

7.

There are 15 players on Team 1. There are 22 players on Team 2.

There are more offensive players than defensive players on each team.

Quantity A

Number of goalies on Team 1

Quantity B

Number of goalies on Team 2

- 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.

diagnostic test

8.

$$\frac{y}{x} = 3$$

$$x, y \neq 0$$

Quantity A

$$x$$

Quantity B

$$y$$

- 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.

Questions 9–20 have several formats. Unless the directions state otherwise, choose one answer choice. For Numeric Entry questions, follow the instructions below.

Numeric Entry Questions

The following items are the same for both the computer-based version and the paper-based version of the test. However, those taking the computer-based version will have additional information about entering answers in decimal and fraction boxes on the computer screen. Those taking the paper-based version will have information about entering answers on answer grids.

- Your answer may be an integer, a decimal, or a fraction, and it may be negative.
- If a question asks for a fraction, there will be two boxes. One box will be for the numerator and one will be for the denominator.
- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

9. Evaluate the function

$$f(x) = 5x^3 + 4x^2 + 8x + 1, \text{ when } x = 2.$$

SHOW YOUR WORK HERE

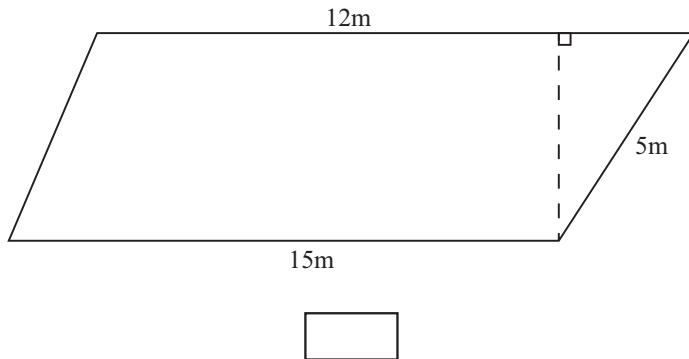
- A. 73
 B. -11
 C. 183
 D. 117
 E. -73

10. If $2x - y = -1$ and $3x + 2y = 16$, what is x ? SHOW YOUR WORK HERE
- A. 5
B. 2
C. $\frac{15}{7}$
D. $\frac{1}{2}$
E. $\frac{7}{15}$
11. If $\frac{3}{x-1} = \frac{6}{3x+6}$, then $x =$
- A. -8
B. -1
C. 0
D. 1
E. 8
12. A new model hybrid car gets 45 miles per gallon for city driving and 20% more for highway driving. How many miles per gallon does the hybrid get for highway driving?
- A. 34
B. 46
C. 51
D. 54
E. 58

diagnostic test

For Question 13, enter your answer in the box.

13. Find the area of the parallelogram.



Questions 14–16 refer to the table below.

Number of Children per Family in a Neighborhood

Number of Children	Number of Families
1	19
2	36
3	21
4+	9
0	15

14. What is the total number of families that have no more than two children?

SHOW YOUR WORK HERE

- A. 19
- B. 36
- C. 55
- D. 70
- E. 81

15. What is the percentage of families who have no children?

- A. 9%
- B. 12%
- C. 15%
- D. 18%
- E. 21%

16. What percentage of the families has 6 children?

A. 19
B. 9
C. 15
D. 12
E. unknown

17. In the xy -plane, what is the slope of a line that is perpendicular to the line whose equation is $x + 2y = 5$?

A. -2
B. $-\frac{1}{2}$
C. $\frac{1}{2}$
D. 2
E. 5

18. What is the x -coordinate of the point at which the graphs of the equations $x + 2y = 4$ and $y - x = 2$ intersect?

A. -8
B. -2
C. 0
D. 2
E. 16

SHOW YOUR WORK HERE

diagnostic test

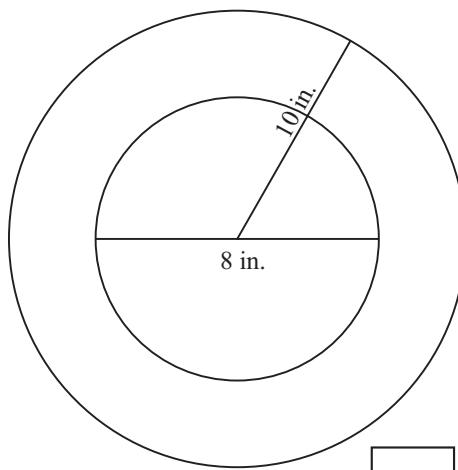
For Question 19, choose all the answers that apply.

SHOW YOUR WORK HERE

19. In triangle ABC , the length of side AB is 4 cm and the length of side BC is 8 cm. Which of the following could be the length of side AC ?
- A. 2 cm
 - B. 4 cm
 - C. 6 cm
 - D. 8 cm
 - E. 10 cm
 - F. 12 cm

For Question 20, enter your answer in the boxes.

20. Suppose that the concentric circles below share the same center. What is the ratio of the circumference of the smaller circle to the larger one?



Give your answer as a fraction:
 $\frac{\square}{\square}$

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

Practice Test 2

The test begins with general information about the number of sections on the test (six for the computer-based version, including the unidentified unscored section or an identified research section, and five for the paper-based version) and the timing of the test (approximately 3 hours and 45 minutes including one 10-minute break after Section 3, 1-minute breaks after the other sections for the computer-based version, and 3 hours and 30 minutes for the paper-based version with similar breaks). The following practice test contains the five scored sections.

Each section has its own time allocation and, during that time period, you may work on only that section.

Next, you will read ETS's policy on scoring the Analytical Writing responses. Each essay is read by experienced readers, and ETS may cancel any test scores that show evidence of unacknowledged use of sources, unacknowledged collaboration with others, preparation of the response by another person, and language that is "substantially" similar to the language in one or more other test responses.

Each section has specific instructions for that section.

You will be told when to begin.

Practice Test
2



Analyze an Argument

FOR PLANNING

answer sheet



Section 2: Verbal Reasoning

1. A B C D E 11. A B C
2. A B C D E 12. A B C D E
3. A B C D E F 13. A B C D E
4. A B C D E F 14. A B C D E
5. A B C D E F G H I 15. A B C D E
6. A B C D E 16. A B C D E F
7. A B C D E
8. A B C D E
9. A B C D E
10. A B C D E

Section 3: Verbal Reasoning

1. A B C D E 11. A B C D E
2. A B C D E F 12. A B C D E
3. A B C D E F 13. A B C
4. A B C D E F 14. A B C D E
5. A B C D E F G H I 15. A B C D E
6. A B C D E 16. A B C D E
7. A B C
8. A B C D E
9. A B C D E
10. A B C D E

Section 4: Quantitative Reasoning

1. A B C D 11. A B C D E
2. A B C D 12. A B C D E
3. A B C D 13. A B C D E
4. A B C D 14. A B C D E
5. A B C D 15. A B C D E F G
6. A B C D 16. A B C D E F G H
7. A B C D 17.
8. A B C D
9. A B C D E
10. A B C D E

18.

19.

20. A B C D E

**Section 5: Quantitative Reasoning**

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D E
10. A B C D E

11. A B C D E
12. A B C D E
13. A B C D E
14. A B C D E
15. A B C D E

16. A B C D
17. A B C D E F G H
18.
19.
20. A B C D E F G H

answer sheet

SECTION 1: ANALYTICAL WRITING

Analyze an Issue

30 minutes

The time for this task is 30 minutes. You must plan and draft a response that evaluates the issue given below. If you do not respond to the specific issue, your score will be zero. Your response must be based on the accompanying instructions, and you must provide evidence for your position. You may use support from reading, experience, observations, and/or course work.

Some people think that the ideal parents are strict disciplinarians who keep their children on the straight and narrow path with firm yet loving control. Others argue that ideal parents form loving bonds with their children through a relationship closer to friendship and a less authoritarian approach.

Write a response in which you discuss which viewpoint more closely aligns with your own position and explain your reasoning for the position you take. You should address both of the views presented in developing and supporting your position.

Your response will be read by experienced readers who will assess your ability to do the following:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based version of the GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

Analyze an Argument**30 minutes**

The time for this task is 30 minutes. You must plan and draft a response that evaluates the argument given below. If you do not respond to the given argument, your score will be zero. Your response must be based on the accompanying instructions, and you must provide evidence in support of your analysis.

You should not present your views on the subject of the argument but on the strengths or weakness of the argument.

The constant use by children of computers, computer games, and devices such as smart phones that integrate computer technology is perilously diminishing the attention spans of the students at Medville Elementary. A coalition of concerned parents and teachers hereby recommends the banning of computers, computer games, and cell phones in Medville School (except when a phone must be used for necessary communication with parents/guardians or other caregivers at designated times and in designated areas), and the judicious use of computers only when necessary to teach fundamental skills, such as searching for information. All of us want to educate children who can maintain the kind of sustained, focused attention that will be necessary for success in the twenty-first-century workplace.

Write a response that raises questions that would have to be answered in order to evaluate the reasonableness of the recommendation and the argument on which it is based. Be sure to explain how the answers to the questions would help to determine whether the argument and recommendation are reasonable.

Your response will be read by experienced readers who will assess your ability to do the following:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based version of the GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

INSTRUCTIONS FOR THE VERBAL REASONING AND QUANTITATIVE REASONING SECTIONS

You will find information here on the question formats for the Verbal Reasoning and Quantitative Reasoning sections, as well as information about how to use the software program, or, if you're taking the paper-based version, how to mark your answers in the answer booklet.

Perhaps the most important information is a reminder about how these two sections are scored. Every correct answer earns a point, but points are not subtracted for incorrect answers. The advice from ETS is to guess if you aren't sure of an answer. ETS says that this is better than not answering a question.

All multiple-choice questions on the computer-based test will have answer options preceded by either blank ovals or blank squares, depending on the question type. The paper-based test will follow the same format for answer choices, but it will use letters instead of ovals or squares for answer choices.

For your convenience in answering questions and checking answers, this book uses letter designations (A, B, C, etc.) for answer choices. Having these letters to refer to will make it easier for you to check your answers against the answer key and explanation sections.

SECTION 2: VERBAL REASONING

30 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 35 minutes.)

For each question, follow the specific directions and choose the best answer.

For Questions 1–5, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. While the distinction of being cold-blooded may conjure images of creatures with constant low-temperature blood, it actually describes animals that are incapable of _____ their internal temperatures.

A. comprehending
B. defusing
C. limiting
D. regulating
E. prescribing

2. Although there is much talk about the value of entrepreneurship, less is said about intrapreneurship, or entrepreneurial activity within an existing business. The creation of the iPhone® by Apple® is an example of intrapreneurship. The innovative spirit within Apple has produced a number of such _____ products.

A. similar
B. exceptional
C. innovative
D. excellent
E. breakthrough

3. Although the scientific evidence for human activity as the cause of climate change appears (i) _____, many remain (ii) _____ that it's simply part of the natural climate cycle. One wonders in that case if they have considered the possibility of an Ice Age.

Blank (i)	Blank (ii)
A. urgent	D. implacable
B. irrefutable	E. inflexible
C. uncontrollable	F. adamant

practice test 2

4. Cinema made a very awkward transition from the silent era to the sound era. Filmmakers had great difficulty figuring out how to record their casts' voices and would attempt (i) _____ solutions, such as hiding microphones in props, which might require an actor to speak into something such as a plant. Needless to say, this resulted in some rather (ii) _____ dramatic moments.

Blank (i)

A. efficacious
B. clumsy
C. ingenious

Blank (ii)

D. absurd
E. riveting
F. somber

5. The (i) _____ nature of modern pop culture makes it easy to think of it as throwaway culture, here today and gone in “15 minutes,” in a(n) (ii) _____ to Andy Warhol. However, it is possible that some elements of it may indeed be (iii) _____.

Blank (i)

A. imperceptible
B. discernible
C. inconsequential

Blank (ii)

D. illusion
E. allusion
F. paraphrase

Blank (iii)

G. memorable
H. prestigious
I. prominent

For Questions 6–20, choose only one answer choice unless otherwise indicated.

Questions 6–8 are based on the following passage.

In a *Washington Post* column, Abigail Trafford raised a question about the reportage of the health of presidents and presidential candidates. She noted that the past has made us cautious about White House cover-ups regarding presidents’ illnesses. Yet she pointed to *Line* an interesting dilemma: that of the confidentiality of the doctor–patient relationship. How can we reconcile the public’s right to know with a public figure’s right to this confidential relationship? Trafford brings up a suggestion posed by historian Robert H. Ferrell that “the personal physicians of the president be scrutinized by Congress.” Ferrell believes that this would deter physicians from saying anything untruthful regarding the president’s health. But Trafford points out that this would cause many doctors to reconsider becoming the president’s doctor if it meant being questioned by Congress. Robert S. Robins, a professor of political science at Tulane University, is quoted in the column as believing that this could result in the president’s ending up with a choice he doesn’t want. Robins says, “This could lead a president to forgo treatment rather than see his doctor or to secretly consult people he trusts.” Trafford herself believes that some information from medical reports can also be misleading if they are not followed up on.

6. This passage implies that if Congress were involved in the choice of the president's doctor, the
- A. president would no longer be able to consult Congress on certain crucial issues.
 - B. American public would no longer need to know so many specific details about the health of the president.
 - C. White House could no longer cover up details about the health of the president.
 - D. president's doctor would totally respect the confidentiality of the president.
 - E. president would not agree to accept the choice of doctor.

For Question 7, consider each answer choice individually and select all answer choices that apply.

7. In this passage, "reconcile" (line 5) most nearly means
- A. coordinate.
 - B. merge.
 - C. reunite.
 - D. assuage.
 - E. pacify.
8. The author of the passage most likely agrees with which view as described in the passage?
- A. Personal physicians of the president should be scrutinized by Congress.
 - B. The current system of choosing a doctor for the president is flawed.
 - C. The White House no longer covers up the health of the president quite so much as it used to.
 - D. There would probably be a smaller pool of doctors to choose from if Congress had a say in the choice of doctors for the president.
 - E. The press publishes too much information about the health of the president.

Questions 9 and 10 are based on the following passage.

Contemporary forms of mixed media art have their genesis in some of the early twentieth-century works of Pablo Picasso and Georges Braque, who first called these works *collage*. Interestingly, the combination, or even agglutination, of visual media has been around at Line least since Byzantine artists added gold leaf to their paintings. Nevertheless, for the Cubist 5 practitioners, the new combinatory methods challenged old notions of what a painting could be, and the new freedoms they embodied served as approaches either to further fragmentation of the picture plane or to adding a third dimension, through texture and layering, to the two-dimensional surface. By introducing what Braque called displaced objects, such as pieces of cloth or multiple layers of newspaper, and what later artists called found objects, 10 early collage makers, as well as contemporary artists, pushed the painting envelope to ask new questions such as whether art could be made with already existing materials, to what extent the process of making art superseded or was of equal importance to the product, and to what degree art and the objects of real life were, indeed, separate. Scores of later artists further developed these questions and added new ones, including Marcel Duchamp, the great

practice test 2

¹⁵ conceptual artist; Robert Rauschenberg, a pioneer in the use of materials traditionally thought to be beyond the realm of art; and Rosemarie Trockel, producer of the first machine-knitted pictures, among other groundbreaking mixed media works.

9. Which of the following, if it were true, would weaken the author's argument?
- A. Leonardo DaVinci consciously mixed dry and wet visual media in order to make a statement about the limitations of Italian art.
 - B. William Blake employed an early form of mixed media when he added vibrant watercolor washes to his prints.
 - C. As early as the twelfth century, Japanese artists employed collage methods to make paper for painting.
 - D. Rosemarie Trockel stretched knitted woolens over a frame to create some of her mixed media art.
 - E. Duchamp, most famously known for Dadaism, proclaimed the purpose of art to be to please the mind, not the eye.
10. As used in the passage, "agglutination" (line 3) most likely means
- A. separation
 - B. colorful
 - C. artistic
 - D. cohesion
 - E. experimentation

Questions 11–13 are based on the following passage.

Officially completed in 2003, the Human Genome Project was an international research collaboration that sought to identify the 20,000 to 25,000 genes of the human genome, to map the sequence of those genes, and to make that information freely available for scientific *Line* research. While these goals were largely met, the Project simultaneously opened a tap from which a flood of ethical and legal questions poured.

For example, in 2013, knowledge derived from the Human Genome Project helped both to revive and put to rest issues related to the HeLa cell line. This cell line, derived from the tissue of a 1951 cancer patient without her consent or knowledge, was widely disseminated and has been in use for more than sixty years. This use was never without its ethical ⁵ complexities. Still, when researchers who had benefited from knowledge gained through the Human Genome Project posted the HeLa genome online in 2013, the situation became even more complicated because, by making the descendants' genetic information known to all, scientists further violated privacy rights. The problem was solved by placing the information in a controlled-access database that ensured its availability to researchers, yet also limited it ¹⁰ to specific terms of use.

In another case, the Supreme Court ruled in 2013 that naturally occurring DNA cannot be patented. Using information uncovered by the Human Genome Project, scientists and

private companies have spent considerable resources extracting and sequencing human DNA that might help cure breast cancer and other diseases. The question arose of who owned such 20 extracted DNA in which genes are encoded. In the same decision, the Court acknowledged the importance of private research by deciding that modified DNA sequences are patent eligible.

For Question 11, consider each answer choice individually and select all answer choices that apply.

11. What was significant about the Supreme Court's decision regarding DNA?
 - A. It repudiated some of the findings of the Human Genome Project.
 - B. It decided that companies could not patent naturally occurring DNA.
 - C. It decided ownership of human DNA.
12. The point of this passage is to
 - A. elucidate the timeline and sequence of accomplishments of the Human Genome Project.
 - B. detail two legal issues that arose as a result of findings of the Human Genome Project.
 - C. explain why the Human Genome Project continues to be an ethical minefield.
 - D. inform the reader about the purpose of the Human Genome Project and how it has changed international research.
 - E. delineate the conflict between private and public interest related to findings of the Human Genome Project.
13. Select the sentence in the passage that does NOT add support to the main idea.
 - A. The question arose of who owned such extracted DNA in which genes are encoded.
 - B. Still, when researchers who had benefited from knowledge gained through the Human Genome Project posted the HeLa genome online in 2013, the situation became even more complicated because, by making the descendants' genetic information known to all, scientists further violated privacy rights.
 - C. The problem was solved by placing the information in a controlled-access database that ensured its availability to researchers, yet also limited it to specific terms of use.
 - D. Officially completed in 2003, the Human Genome Project was an international research collaboration that sought to identify the 20,000 to 25,000 genes of the human genome, to identify the sequence of those genes, and to make that information freely available for scientific research
 - E. Using information uncovered by the Human Genome Project, scientists and private companies have spent considerable resources extracting and sequencing human DNA that might help cure breast cancer and other diseases.

practice test 2

Questions 14 and 15 are based on the following passage.

Historians are often drawn to studies of African American migration as a way of understanding the black urban experience, both past and present. But as Gretchen Lemke-Santangelo points out in her book *Abiding Courage*, black urban migration studies frequently focus on just the first two decades of the twentieth century and most often on the experiences of men. Lemke-Santangelo sets out to generate “new perspectives on where and how social change takes place.” Therefore, the subjects of her study are black Southern women who migrated to California’s East Bay community during World War II. In this way, Lemke-Santangelo introduces the reader to a much lesser known (but no less important) aspect of African American migration history, namely the move from the South to the West, which occurred with increasing frequency during the 1940s. Also, by underscoring the experience of women, Lemke-Santangelo demonstrates the importance of female participation in the migration process and the subsequent organization of the new community.

14. “Underscoring” (line 10) most nearly means
- A. overrating.
 - B. accentuating.
 - C. facilitating.
 - D. recommending.
 - E. obfuscating.
15. Select the sentence that restates the premise of the author’s argument.
- A. African American women in the 1940s migrated in much greater numbers to the West than was previously understood.
 - B. The experience of African American men in the Great Migration is entirely limited.
 - C. Urban migration studies are not complete if they only focus on certain experiences.
 - D. The first two decades of the twentieth century saw the greatest movement of African Americans out of the South.
 - E. African American women were instrumental in organizing new communities in the West.

For Questions 16–19, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

16. Because of _____ wording in the press release, some people thought that the CEO was being ousted because of irregularities in accounting, when it was the CFO who was fired.
- A. explicit
 - B. mystifying
 - C. inscrutable
 - D. ambiguous
 - E. impressionable
 - F. equivocal

17. The particularly _____ caricature done by the artist's wife showed her intense, though subconscious, dislike of her husband.
- A. amateurish
 - B. grotesque
 - C. imitative
 - D. bizarre
 - E. incompetent
 - F. mocking
18. The brainstorming activity resulted in _____ ideas for how to improve morale and boost productivity—but in the evaluative process, most were found not to be viable.
- A. satisfactory
 - B. sufficient
 - C. requisite
 - D. elective
 - E. abundant
 - F. copious
19. While many people seek thrills by seemingly defying death aboard roller coasters, the excitement they derive is merely _____, forcing them to find increasingly terrifying machines to reignite their excitement.
- A. deleterious
 - B. evanescent
 - C. ephemeral
 - D. invariable
 - E. breathtaking
 - F. incorrigible

Question 20 is based on the following passage.

Despite the seeming benefits to the environment that electric cars provide, there are still several challenges that need to be addressed if fully electric vehicles can be realistically expected to replace fuel-powered cars or hybrids in the foreseeable future. Currently, electric cars are limited by the output of their batteries and the current technology that uses energy produced while braking to partly recharge the batteries. This technology would have to be improved in order to allow drivers to travel long distances. In addition, most plug-in electric cars take hours to recharge, which is another serious hindrance to their long-term use. Finally, in order for electric cars to become a truly workable option, charging and battery-exchange stations will have to be put in place everywhere cars are driven. These stations will also have to be designed in such a way that their operation would not drain the power from municipal power grids. There is also the question of electricity production. As long as electric power plants continue to run on nonrenewable fossil fuels, such as coal, recharging electric cars will still release carbon emissions into the atmosphere, which is not a benefit to the environment.

practice test 2

20. What is the author's opinion about the future of electric cars?
- A. There are serious pros and cons to this issue.
 - B. It is probably not a realistic option.
 - C. Technology simply needs to improve.
 - D. Electric cars do not solve the problem of carbon emissions in the atmosphere.
 - E. The production of electricity will continue to rely on fossil fuels.

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.**

SECTION 3: VERBAL REASONING***30 minutes • 20 questions****(The paper-based version will have 25 questions to be completed in 35 minutes.)*

For each question, follow the specific directions and choose the best answer.

For Questions 1–5, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. A _____ weekend in the country is precisely what is required after a week as arduous as this one has been.

A. strenuous
B. picturesque
C. palliative
D. reminiscent
E. parsimonious

2. Though (i) _____, the conclusions are based on actual economic activities as surveyed by a(n) (ii) _____ outside research team.

Blank (i)

A. certainly credible
B. actually impervious
C. seemingly implausible

Blank (ii)

D. impartial
E. interested
F. nonpartisan

3. In 1961, putting a man on the moon by 1970 seemed not only (i) _____, but also not (ii) _____ in the time frame.

Blank (i)

A. improbable
B. unusual
C. fortuitous

Blank (ii)

D. serviceable
E. feasible
F. durable

4. By (i) _____ all responsibility for the matter, she placed the (ii) _____ squarely on my shoulders.

Blank (i)

A. vacillating
B. relinquishing
C. repealing

Blank (ii)

D. recompense
E. onus
F. surplus

practice test 2

5. The success of the show's previews (i) _____ the need for reworking the script. However, the male lead (ii) _____ the playwright to expand his role, but the playwright (iii) _____ and nothing happened.

Blank (i)

A. reduced
B. obviated
C. discarded

Blank (ii)

D. taunted
E. persisted
F. importuned

Blank (iii)

G. condescended
H. demurred
I. patronized

For Questions 6–20, choose only one answer choice unless otherwise indicated.

Questions 6–8 are based on the following passage.

Demoralization and malaise resulting from factors as disparate as the loss of the war in Vietnam, the humiliation of the Watergate scandal, and inflation all prepared and fertilized the ground for what is now sometimes called the Reagan Revolution, a turning back of the *Line* clock on the dominant liberalism that had characterized the nation's politics almost since FDR first took power. Elected and re-elected in the 1980s, Reagan preached a new and simplified conservative doctrine that included American exceptionalism as well as a focus on the problems of big government, or the “welfare state” as characterized by conservatives.

One might ask, however, how consistently conservative Reagan was, as he questioned, as early as 1964, and in an era of New Deal saturation in Washington, whether Americans might “abandon the American Revolution and confess that a little intellectual elite in a far-distant capital can plan our lives for us better than we can plan them ourselves.” At the same time, Reagan focused endlessly on two great threats to the United States: communism abroad and radicalism within. The radicalism, of course, often existed on college campuses and was the province of the “intellectual elite.” Rising crime rates in U.S. cities also informed and motivated his political policies. Less government, stronger defense, and renewed U.S. prestige were stated goals of the conservative revolution, while an anti-intellectual current often coursed fast and hard below its surface.

6. Select the sentence in the passage that is least central to the main idea.
- A. Elected and re-elected in the 1980s, Reagan preached a new and simplified conservative doctrine that included American exceptionalism as well as a focus on the problems of big government or the “welfare state” as characterized by conservatives.
 - B. One might ask, however, how consistently conservative Reagan was, as he questioned, as early as 1964, and in an era of New Deal saturation in Washington, whether Americans might “abandon the American Revolution and confess that a little intellectual elite in a far-distant capital can plan our lives for us better than we can plan them ourselves.”
 - C. At the same time, Reagan focused endlessly on two great threats to United States: communism abroad and radicalism within.
 - D. The radicalism, of course, existed often on college campuses, and was the province of the “intellectual elite.”
 - E. Rising crime rates in U.S. cities also informed and motivated his political policies.

practice test 2

For Question 7, consider each answer individually and choose all that apply.

7. Which of the following, if it were true, would weaken the author's argument?
 - A. Reagan joined in and enlarged the battle against Great Society liberalism.
 - B. Reagan viewed antiwar and other protestors as antipatriotic naysayers.
 - C. Reagan often turned to conservative think tanks to provide ideological underpinning for his agenda.

8. The passage implies that Reagan would have said that
 - A. taxes needed to be cut for the sake of fairness.
 - B. the United States was the greatest country in the world.
 - C. recent advances resulting from the Civil Rights Movement had humanized and democratized America.
 - D. the Founders were representative Americans with representative American hopes and aspirations.
 - E. Soviet expansionism could not be tamed by force alone.

Questions 9 and 10 are based on the following passage.

The evidence is manifold for why gene therapy is now used only for those diseases that have no cures. By means of gene therapy, a technique that is still in its infancy, researchers and medical geneticists seek to cure illness without drugs or surgery. They believe this might *Line* be accomplished in various ways, **such as through the inactivation of a mutated gene or** **5 the replacement of a mutated gene with a healthy copy of that gene.** Theoretically, gene therapy surpasses all current medical science in both eloquence of promise and elegance of design. Yet, in its execution, results have been mixed at best, **as some patients have not** **rallied and at least one has died as a result.** Furthermore, even when gene therapy appears to be at its most promising, its cost is prohibitive. For example, the European Commission **10** recently approved a gene therapy treatment for a rare lipoprotein disease, but it will have an estimated cost of \$1.6 million for a single patient.

9. Based on the passage, the author evidently believes that
 - A. there needs to be more funding for gene therapy.
 - B. gene therapy research and treatments should be abandoned.
 - C. replacement genes cannot be effective in curing disease.
 - D. the use of gene therapy should be expanded to more diseases.
 - E. the promise of gene therapy has not yet been realized.

10. What function do the two groups of words in bold type serve in this argument?
- A. The first provides an explanation of evidence; the second provides an example of an argument.
 - B. The first supports an argument; the second provides an example of evidence.
 - C. The first provides support for the author’s conclusion; the second confirms the support for the conclusion.
 - D. The first provides an example of evidence; the second provides an explanation of evidence.
 - E. The first presents an argument; the second provides evidence to support the argument.

Questions 11–13 are based on the following passage.

According to its own website, Wikipedia is “a free, web-based, collaborative, multilingual encyclopedia project.” The obvious advantage of an online encyclopedia is that it can instantly produce articles on up-to-the-minute topics. However, unlike traditional encyclopedias, *Line* the millions of articles on Wikipedia can be edited by anyone who visits the website. Not surprisingly, this means that a lot of information on Wikipedia is incorrect or biased, or has no other sources to back it up.

If you use Wikipedia for research, you must proceed with caution. Some articles may contain serious factual errors, and some may be in the process of being edited. Some articles are deficient, presenting only one side of a controversial issue or detailing only certain parts ¹⁰ of a person’s life. In addition, many contributors to Wikipedia do not cite their sources, which can make it difficult to judge the credibility of what is written. Sometimes Wikipedia articles reference other resources, such as news articles, which can be helpful, but these should be verified. In many cases, Wikipedia can provide a good starting point from which to begin your research, but it should never be your only source of information.

11. Select the sentence from the passage that best exemplifies the main point of the author.
- A. Not surprisingly, this means that a lot of information on Wikipedia is incorrect, or biased, or has no other sources to back it up.
 - B. The obvious advantage of an online encyclopedia is that it can instantly produce articles on up-to-the-minute topics.
 - C. In many cases, Wikipedia can provide a good starting point from which to begin your research, but it should never be your only source of information.
 - D. In addition, many contributors to Wikipedia do not cite their sources, which makes it difficult to judge the credibility of what is written.
 - E. Some articles are deficient, presenting only one side of a controversial issue or detailing only certain parts of a person’s life.

practice test 2

12. In the passage, “credibility” (line 11) means

- A. recognition
- B. clarity
- C. trustworthiness
- D. readability
- E. feasibility

For Question 13, consider each answer choice individually and choose all that apply.

13. Based on the article, how should a person use Wikipedia when doing research on a particular topic?

- A. Start with Wikipedia and then move on to more academic sources.
- B. Do not use Wikipedia unless there is no other information to be found on the topic.
- C. Use only those Wikipedia articles that contain citations.

Questions 14–16 are based on the following passage.

Of the novels published in the late eighteenth and early nineteenth centuries, Jane Austen’s are among the few to survive to the present day. However, during her lifetime, Austen’s novels were not read widely and were noted by just a few critics who reviewed them, mostly *Line* favorably. Not long after Austen died in 1817, most of her novels were all but forgotten.

5 This changed in 1870 with the publication of *Memoir of Jane Austen*, written by her nephew James Edward Austen-Leigh. Although his portrayal of Austen was somewhat misleading, the biography marked the beginning of a new appreciation of Jane Austen’s works, both in scholarly and popular circles. Austen-Leigh portrayed his Aunt Jane as a woman who recorded the domestic rural life she lived in just as she saw it—with all its domestic crises *10* and affairs of the heart. This memoir had an immeasurable effect on the public perception of Jane Austen, and it dramatically increased her popularity. The publication of the memoir also spurred the reissue of Austen’s novels, which became popular classics and in the twentieth century, popular movies and television programs.

14. Without publication of the *Memoir of Jane Austen*, which of the following would likely be true?

- A. Modern readers would not still be reading the works of Jane Austen.
- B. People’s opinions of Jane Austen would not be based on misleading information.
- C. Jane Austen’s books would not have been reissued.
- D. People would not know much about the lives of women in the nineteenth century.
- E. Modern readers would know much less about Jane Austen’s life.

15. Based on the passage, what was the most significant result of the publication of the memoir?
- A. It introduced the reading public to the works of Jane Austen.
 - B. It changed the public's perception of Jane Austen.
 - C. It made her works a critical and popular success.
 - D. It gave Austen's fans a glimpse into the real life of their beloved author.
 - E. It recorded the details of late eighteenth-century rural life.
16. In the passage, “immeasurable” (line 10) means
- A. incalculable.
 - B. monstrous.
 - C. infinitesimal.
 - D. intricate.
 - E. convoluted.

For Questions 17–20, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

17. During the 1850s, zoologist Sir Richard Owen performed a great service to paleontology by constructing the first full-size dinosaur models even though the way he imagined the Iguanodon was completely _____.
- A. authentic
 - B. erroneous
 - C. awe-inspiring
 - D. decorous
 - E. inaccurate
 - F. pastoral
18. Wildlife in urban areas includes such non-typical city creatures as foxes that have increased as restaurants with their treat-filled garbage bags have _____.
- A. gotten along
 - B. proliferated
 - C. progressed
 - D. advanced
 - E. multiplied
 - F. thrived

19. Big box stores cause anxiety among small towns and cities because they appear to be the harbingers of the _____ of the downtown business area as shoppers forsake local small businesses for the big discounters.
- A. decline
 - B. degradation
 - C. depreciation
 - D. obsolescence
 - E. deterioration
 - F. retrogression
20. Among the most memorably _____ literary characters are the blood-sucking vampire Count Dracula and Dr. Frankenstein's murderous creature.
- A. diabolical
 - B. iniquitous
 - C. infamous
 - D. enduring
 - E. momentous
 - F. fabricated

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

practice test 2

SECTION 4: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

The test-maker provides the following information that applies to all questions in the Quantitative Reasoning section of the GRE® General Test:

- All numbers used are real numbers.
- All figures are assumed to lie in a plane unless otherwise indicated.
- Geometric figures, such as lines, circles, triangles, and quadrilaterals, *are not necessarily* drawn to scale. That is, you should *not* assume that quantities such as lengths and angle measures are as they appear in a figure. You should assume, however, that lines shown as straight are actually straight, points on a line are in the order shown, and more generally, all geometric objects are in the relative positions shown. For questions with geometric figures, you should base your answers on geometric reasoning, not on estimating or comparing quantities by sight or by measurement.
- Coordinate systems, such as xy -planes and number lines, *are* drawn to scale. Therefore, you can read, estimate, or compare quantities in such figures by sight or by measurement.
- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.

Quantity A

$$2^{-2} \cdot \sqrt{\frac{9}{4}}$$

Quantity B

$$\frac{2}{3} \cdot 4^{-1}$$

- 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.

practice test 2

2.

$$xy = 12$$

Quantity A

$$(3x)(2y)$$

Quantity B

$$60$$

- 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.

3.

Quantity A

$$40\% \text{ of } \frac{5}{8}$$

Quantity B

$$60\% \text{ of } \frac{3}{4}$$

- 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.

4.

Assume $x < 0 < y$.Quantity A

$$\frac{x}{y}$$

Quantity B

$$\frac{y}{x}$$

- 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.

5.

$$x + 3 = 4x - 2$$

$$5y - 2 = 2y + 1$$

Quantity A

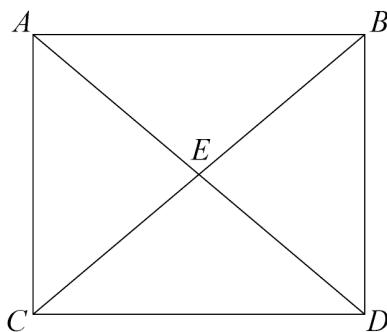
$$3x$$

Quantity B

$$6y$$

- 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.

6.

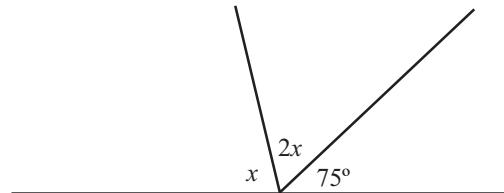


Quantity A
The area of AEC

Quantity B
The area of CED

- 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.

7.



Quantity A
 $5x$

Quantity B
180

- 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.

8.

A 2,475-square-foot house sells for \$475,000. The broker's fee is 6%.

Quantity A
The broker's fee

Quantity B
\$31,000

- 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.

practice test 2

Questions 9–20 have several formats. Unless the directions state otherwise, choose one answer choice. For the Numeric Entry questions, follow the instructions below.

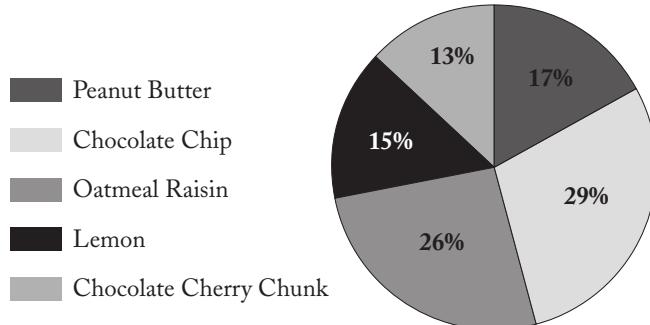
Numeric Entry Questions

The following items are the same for both the computer-based version and the paper-based version of the test. However, those taking the computer-based version will have additional information about entering answers in decimal and fraction boxes on the computer screen. Those taking the paper-based version will have information about entering answers on answer grids.

- Your answer may be an integer, a decimal, or a fraction, and it may be negative.
- If a question asks for a fraction, there will be two boxes. One box will be for the numerator and one will be for the denominator.
- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

Questions 9–11 refer to the chart below.

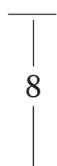
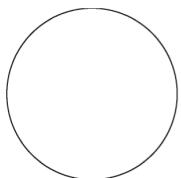
Sales by Type 2010



9. The two least popular types of cookies represent what percentage of sales?
- A. 13%
B. 15%
C. 26%
D. 28%
E. 30%
10. How many different types of cookies do NOT have chocolate in them?
- A. 1
B. 2
C. 3
D. 4
E. 5

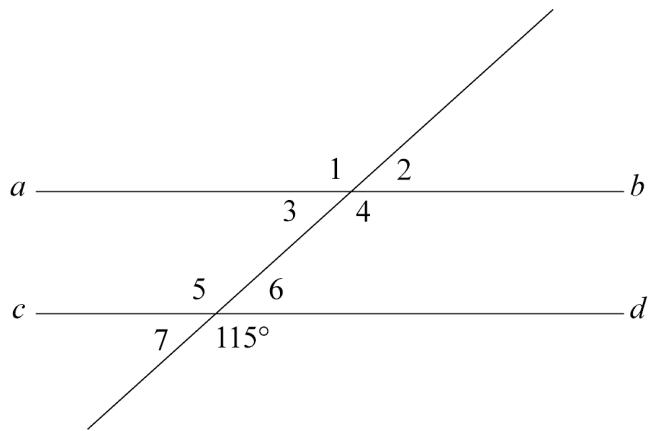
11. If total sales for the year were \$94,480, what was the total amount sold of the third most popular cookie?

- A. \$12,543
- B. \$16,062
- C. \$17,727
- D. \$24,980
- E. \$27,589



12. The above circle has a diameter of 8, and the square has a perimeter of 32. What is the difference in the area between the two?
- A. 11.82
 - B. 12.96
 - C. 13.33
 - D. 13.76
 - E. 15.97
13. Lacy receives 45% of the commission of every painting she sells. If she recently sold a painting for \$256,000 and received a commission of \$7,488, what was the total rate of commission?
- A. 0.016
 - B. 0.029
 - C. 0.065
 - D. 0.067
 - E. 0.076
14. The expression $(a - b)^2 - a(a + b)$ is equivalent to
- A. $b^2 - a^2$
 - B. $b^2 + b$
 - C. $b^2 - 2ab$
 - D. $b^2 - 3ab$
 - E. $b^2 - ab - 2a^2$

For Questions 15 and 16, indicate all the answers that apply.



15. If ab and cd are parallel, what other angles are equal to 115° ?
- A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
 - F. 6
 - G. 7
16. What are the next three numbers in the sequence $0, 1, 3, 7, 15, 31, \dots$
- A. 57
 - B. 63
 - C. 72
 - D. 111
 - E. 127
 - F. 295
 - G. 255
 - H. 511

For Questions 17, 18, and 19, enter your answers in the boxes.

17. Suppose $d > 0$. If $z = \frac{4d - (d - 2d)}{2d - (d + (d - 3d))}$, what does z equal?

Give your answer as a fraction.

<hr/>	

18. $\frac{1}{2} + \frac{1}{3} + \frac{3}{4} + \frac{5}{6} =$

Give your answer as a fraction.

19. On a rugby team of 15 players, the ratio of forwards to backs is $\frac{8}{7}$. What is the ratio of backs to total number of players?

Give your answer as a fraction.

20. If an acre is equal to 43,560 square feet, how many acres are there in 362,985 square feet?
- A. 6.33
 - B. 7.33
 - C. 8.33
 - D. 9.33
 - E. 10.33

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

SECTION 5: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

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- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1. $\frac{5}{8}x = \frac{1}{12}$

Quantity A

x

Quantity B

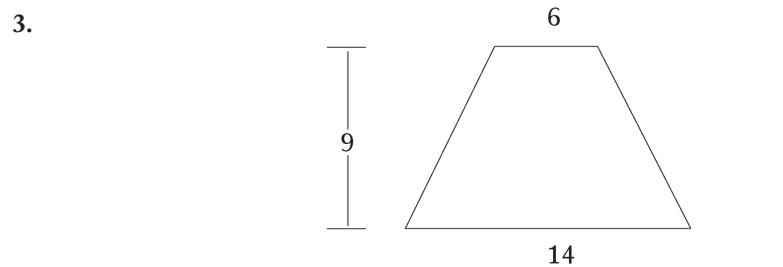
$\frac{2}{15}$

- 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.

practice test 2

2.	<u>Quantity A</u>	<u>Quantity B</u>
	$\frac{(0.002)(0.003)}{0.06}$	0.1×10^{-2}

- 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.



Quantity A	<u>Quantity B</u>
The area of the trapezoid	80

- 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.



Quantity A	<u>Quantity B</u>
The mean of angles x, y, z	60

- 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.

practice test 2

5.

$$\frac{\text{Quantity A}}{\sqrt{(66)(27)}}$$

$$\frac{\text{Quantity B}}{(8)(4.9)}$$

- 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.

6.

$$xy = 3.2$$

$$\frac{\text{Quantity A}}{1.5x(4.6y)}$$

$$\frac{\text{Quantity B}}{22.08}$$

- 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.

7.

$$\frac{\text{Quantity A}}{250\% \text{ of } \frac{2}{5}}$$

$$\frac{\text{Quantity B}}{\frac{2}{5}\% \text{ of } 250}$$

- 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.

8.

An apple costs \$0.25. An orange costs \$0.35. A pear costs $\frac{1}{2}$ of the sum of an apple and an orange.

$$\frac{\text{Quantity A}}{5 \text{ apples and } 5 \text{ oranges}}$$

$$\frac{\text{Quantity B}}{12 \text{ pears}}$$

- 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.

Questions 9–20 have several formats. Unless the directions state otherwise, choose one answer choice. For the Numeric Entry questions, follow the instructions below.

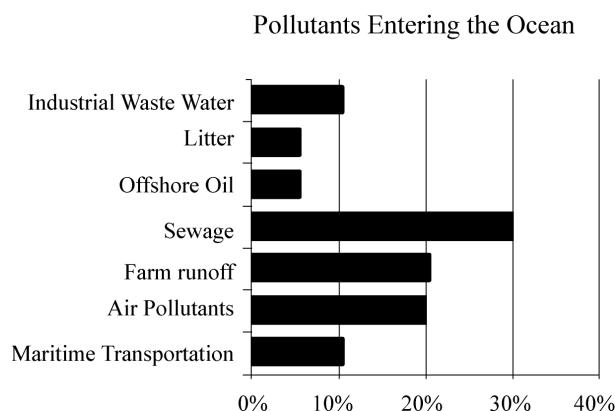
Numeric Entry Questions

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- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

9. A card player selects two cards at random and without replacement from a standard deck of 52 playing cards. What is the probability that the player will select at least one ace?
- A. $\frac{1}{1326}$
B. $\frac{33}{221}$
C. $\frac{188}{221}$
D. $\frac{144}{169}$
E. $\frac{12}{13}$
10. What is the solution to the inequality $(4 - 2x)\frac{1}{2} \leq \frac{1-x}{3}$?
- A. $x \leq \frac{5}{2}$
B. $x > \frac{5}{2}$
C. $x \geq \frac{5}{2}$
D. $x \geq 2$
E. $x \geq \frac{2}{5}$

Questions 11–13 refer to the graph below.



11. What is the percentage of offshore oil as a pollutant?
 - A. 5%
 - B. 10%
 - C. 15%
 - D. 20%
 - E. 30%
12. Sewage, litter, and air pollution make up what percentage of the whole?
 - A. 5%
 - B. 15%
 - C. 30%
 - D. 45%
 - E. 55%
13. If air pollution is eliminated from the graph, what percentage would sewage be of the new graph “Water-Born Pollutants Entering the Ocean”?
 - A. 24%
 - B. 28%
 - C. 37.5%
 - D. 40%
 - E. 44.5%

practice test 2

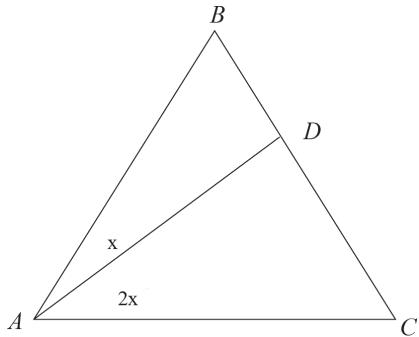
14. A receptionist greeted the following numbers of people during one work week: 4, 19, 21, 18, 23. What is the mean of the number of people she greeted?
- A. 17
B. 19
C. 20
D. 21
E. 85
15. A photographer wants to increase the size of a square picture whose measurements are such that its area is 64 square inches so that the size of the resulting poster is 900% of the size of the original picture. What will be the perimeter of the enlarged photo?
- A. 32 inches
B. 72 inches
C. 288 inches
D. 3,600 inches
E. 5,184 inches

For Questions 16 and 17, choose all the answers that apply.

16. If p and q are integers, and n is an odd integer that is a factor of both $2p$ and q , then n is a factor of which of the following?
- A. $p + q$
B. p
C. $\frac{pq}{n}$
D. $|2p - q|$
17. The local baseball team employs at least 3 times as many pitchers as catchers, but never more than 11 players total. Pitchers make an average of \$45,000, and catchers make an average of \$30,000. Which of the following amounts are the possible averages for all the pitchers and catchers, rounded to the nearest dollar?
- A. \$30,000
B. \$35,899
C. \$40,375
D. \$41,250
E. \$41,956
F. \$42,273
G. \$43,743
H. \$45,000

For Questions 18 and 19, enter your answers in the boxes.

18. Fill in the blank: $\frac{(y^{-2})^{-3} \cdot y^4}{(y^{-3})^2} = y^{\square}$



19. If ABC is an equilateral triangle, what is the measure of angle BAD ?

20. Which of the following are multiples of 18?

- A. 6
- B. 9
- C. 36
- D. 56
- E. 90
- F. 180
- G. 540
- H. 560

answers practice test 2

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.**

Practice Test 3

The test begins with general information about the number of sections on the test (six for the computer-based version, including the unidentified unscored section or an identified research section, and five for the paper-based version) and the timing of the test (approximately 3 hours and 45 minutes including one 10-minute break after Section 3, 1-minute breaks after the other sections for the computer-based version, and 3 hours and 30 minutes for the paper-based version with similar breaks). The following practice test contains the five scored sections.

Each section has its own time allocation and, during that time period, you may work on only that section.

Next, you will read ETS's policy on scoring the Analytical Writing responses. Each essay is read by experienced readers, and ETS may cancel any test scores that show evidence of unacknowledged use of sources, unacknowledged collaboration with others, preparation of the response by another person, and language that is "substantially" similar to the language in one or more other test responses.

Each section has specific instructions for that section.

You will be told when to begin.

Practice Test 3



PRACTICE TEST 3 ANSWER SHEETS

Section 1: Analytical Writing

Analyze an Issue

FOR PLANNING



Section 2: Verbal Reasoning

- | | | |
|----------------------|---------------|-----------------|
| 1. A B C D E | 11. A B C D E | 16. A B C D E F |
| 2. A B C D E | 12. A B C D E | 17. A B C D E F |
| 3. A B C D E F | 13. A B C D E | 18. A B C D E F |
| 4. A B C D E F G H I | 14. A B C | 19. A B C D E F |
| 5. A B C D E F G H I | 15. A B C D E | 20. A B C D E |
| 6. A B C D E | | |
| 7. A B C D E | | |
| 8. A B C | | |
| 9. A B C D E | | |
| 10. A B C D E | | |

Section 3: Verbal Reasoning

- | | | |
|----------------------|---------------|-----------------|
| 1. A B C D E | 11. A B C D E | 16. A B C D E F |
| 2. A B C D E | 12. A B C | 17. A B C D E F |
| 3. A B C D E F | 13. A B C D E | 18. A B C D E F |
| 4. A B C D E F G H I | 14. A B C D E | 19. A B C D E F |
| 5. A B C D E F G H I | 15. A B C | 20. A B C D E |
| 6. A B C D E | | |
| 7. A B C D E | | |
| 8. A B C D E | | |
| 9. A B C D E | | |
| 10. A B C D E | | |

Section 4: Quantitative Reasoning

- | | | |
|---------------|---------------|---------------|
| 1. A B C D | 11. A B C D E | 16. A B C D E |
| 2. A B C D | 12. A B C D E | 17. A B C D E |
| 3. A B C D | 13. A B C D E | 18. A B C D E |
| 4. A B C D | 14. A B C D E | 19. [] |
| 5. A B C D | 15. A B C D E | 20. [] |
| 6. A B C D | | |
| 7. A B C D | | |
| 8. A B C D | | |
| 9. A B C D E | | |
| 10. A B C D E | | |

**Section 5: Quantitative Reasoning**

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D E
10. A B C D E

11.
12.
13.
14.
15.

16. A B C D E
17. A B C D
18. A B C D E F G H
19.
20.

answer sheet

SECTION 1: ANALYTICAL WRITING

Analyze an Issue

30 minutes

The time for this task is 30 minutes. You must plan and draft a response that evaluates the issue given below. If you do not respond to the specific issue, your score will be zero. Your response must be based on the accompanying instructions, and you must provide evidence for your position. You may use support from reading, experience, observations, and/or course work.

The American public education system is broken and only drastic changes can save it.

Write a response that takes and explains the extent to which you agree or disagree with this statement. As you present, develop, and explain your position, discuss when and how the statement might or might not hold true. Explain how those possibilities provide support for your own point of view.

Your response will be read by experienced readers who will assess your ability to do the following:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based version of the GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

Analyze an Argument**30 minutes**

The time for this task is 30 minutes. You must plan and draft a response that evaluates the argument given below. If you do not respond to the given argument, your score will be zero. Your response must be based on the accompanying instructions, and you must provide evidence in support of your analysis.

You should not present your views on the subject of the argument but on the strength or weakness of the argument.

Our local governor has just proposed the construction of a new 30-mile expressway running through our state. The argument behind creating the expressway is that it will increase tourism by making our state more accessible to out-of-towners and provide jobs for our local road workers. However, while these are admirable motivations, the fact that the expressway will run through residential areas, thus displacing both local businesses and citizens, is reason to unwaveringly oppose our governor's plan under any circumstances. We should not sacrifice our citizens in the hopes of drawing visitors into our state.

Write a response that identifies and explains the specific evidence required to determine whether the argument is reasonable. Discuss how that evidence would weaken or strengthen the argument.

Your response will be read by experienced readers who will assess your ability to do the following:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based version of the GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

practice test
3

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

INSTRUCTIONS FOR THE VERBAL REASONING AND QUANTITATIVE REASONING SECTIONS

You will find information here on the question formats for the Verbal Reasoning and Quantitative Reasoning sections, as well as information about how to use the software program, or, if you're taking the paper-based version, how to mark your answers in the answer booklet.

Perhaps the most important information is a reminder about how these two sections are scored. Every correct answer earns a point, but points are not subtracted for incorrect answers. The advice from ETS is to guess if you aren't sure of an answer. ETS says that this is better than not answering a question.

All multiple-choice questions on the computer-based test will have answer options preceded by either blank ovals or blank squares, depending on the question type. The paper-based test will follow the same format for answer choices, but it will use letters instead of ovals or squares for answer choices.

For your convenience in answering questions and checking answers, this book uses letter designations (A, B, C, etc.) for answer choices. Having these letters to refer to will make it easier for you to check your answers against the answer key and explanation sections.

SECTION 2: VERBAL REASONING

30 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 35 minutes.)

For each question, follow the specific directions and choose the best answer.

For Questions 1–5, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. One of the major concerns as states pulled themselves out of the deficits created during the Great Recession was whether they would return to their _____ spending habits once the good times began to roll again.

A. decadent
B. profligate
C. parsimonious
D. immoral
E. licentious

2. Despite the _____ the belligerent man displayed in public, he was secretly terrified that his insecurities might one day be discovered.

A. hauteur
B. timidity
C. aggression
D. mendacity
E. magnanimousness

3. In discussing the vanishing ecosystem of the Grand Canyon, the speaker spoke (i) _____ and passionately about his subject. It was obvious that the (ii) _____ of the natural environment caused him grave concern.

Blank (i)
A. eloquently
B. emotionally
C. prominently

Blank (ii)
D. mutilation
E. reparation
F. destruction

4. The epic heroes who undergo a series of (i) _____ challenges to attain a goal are (ii) _____ feature of many national cultural identities. Many of the challenges involve some (iii) _____ feat of daring.

Blank (i)
A. extraordinary
B. copious
C. massive

Blank (ii)
D. an underlying
E. an external
F. a conventional

Blank (iii)
G. intrepid
H. steadfast
I. resolute

practice test 3

5. Although emailing and texting are undeniably (i) _____ forms of communication, there is no (ii) _____ for taking the time to meet with others in person, lest we become a society of physically (iii) _____ beings hunched over digital devices.

Blank (i)	Blank (ii)	Blank (iii)
A. expedient	D. equivalent	G. immobilized
B. prevalent	E. justification	H. segregated
C. state-of-the-art	F. concern	I. repellent

For Questions 6–20, choose only one answer choice unless otherwise indicated.

Questions 6–8 are based on the following passage.

In the year 1901, Spanish painter Pablo Picasso entered what is now referred to as his Blue Period. At the time Picasso was just 20 years old, living in Paris as a relatively unknown artist. Up to this point, the paintings Picasso produced were vibrantly colored, expressing *Line* the decadent life he and his friend Carlos Casagemas had been leading together in Paris.

5 But the suicide of Casagemas in 1901 was a major trigger for Picasso's Blue Period, in which Picasso began to paint in various shades of blue, giving the paintings a haunting and melancholy feel. The recurring theme of the Blue Period paintings is the desolation of outsiders, which included beggars, prisoners, and circus people. By 1904, Picasso had emerged from the Blue Period and began what is known as the Rose Period, characterized by bright colors, *10* and featuring acrobats and harlequins. A few years later, Picasso began to explore Cubism, which broke completely from the traditional three-dimensional representation of objects, and for which he became famous. The Blue and Rose Periods can be viewed as transitional times for Picasso in which he moved from the traditional art of his youth to the iconoclastic art of his adulthood.

6. Based on the passage, the author evidently believes that
- A. the Rose Period is less significant a time period than the Blue Period in the artistic development of Picasso.
 - B. the suicide of Casagemas had an effect on Picasso that would haunt him for the rest of his life.
 - C. if Picasso had not gone through the Blue and Rose Periods he would have never been ready to explore a new form of art.
 - D. there is no way to understand Cubism without seeing the artistic road that led Picasso to it over the course of his work.
 - E. the Blue Period was how Picasso expressed himself artistically during a difficult time of his life.

7. In this passage, “iconoclastic” (line 13) means
- A. eclectic.
 - B. eccentric.
 - C. consequential.
 - D. revolutionary.
 - E. conservative.

For Question 8, consider each answer individually and select all choices that apply.

8. Which of the following ideas are clearly supported in this passage?
- A. After the Blue Period, Picasso no longer painted pictures of desolation.
 - B. Picasso is best known for his Cubist works.
 - C. The Rose Period was just as significant as the Blue Period in terms of Picasso’s growth as an artist.

Questions 9 and 10 are based on the following passage.

Although the quality of smartphone photos varies by manufacturer, smartphone camera manufacturers are nevertheless putting camera companies out of business. Smartphones offer sophisticated technology in lenses, sensors, flashes, image stabilization, video, and playback.
Line While small gradations in image quality now separate smartphone competitors, a more fundamental difference lies in each smartphone’s organization, storage, and transformational capabilities. Companies that offer organization by capabilities such as facial and other forms of recognition, as well as more streamlined sharing to all devices, have a definite advantage over those that force the user to make fundamental organization and storage choices. Some of these manufacturers even distinguish superior shots, in terms of lighting and composition, from inferior ones, streamlining the selection and deletion process that many smartphone owners must now undertake laboriously by hand. Superior smartphone cameras also have the capability to transform related single shots into an animated GIF.

9. All of the following are stated or implied in this passage EXCEPT:
- A. Smartphone camera image quality and storage vary by manufacturer.
 - B. Small differences in the quality of images now separate smartphone cameras.
 - C. Some smartphone cameras flag or otherwise differentiate good images from bad ones.
 - D. Smartphone cameras offer only slightly better lenses and sensors than traditional cameras do.
 - E. Smartphone camera capability includes creating the appearance of motion from successive shots.

practice test 3

10. Select the sentence that is NOT a major detail that supports the author's opinion.
- A. With a digital camera, you can take thousands of pictures using just one memory card, and you can instantly see the results, while checking for exposure, focus, and sharpness all at the same time.
 - B. The traditional film camera involves much more thought to ensure that every image has the correct exposure, composition, and lighting.
 - C. In addition, film photographers spend hours processing their film and printing it in a darkroom, whereas only a very small percentage of the images taken on a digital camera are processed and printed.
 - D. Of course, there are those who prefer the more organic textures and deliberate process of taking photographs the traditional way.
 - E. Because so much of the guesswork is eliminated, digital cameras are simply better than film cameras for learning the art of photography

Questions 11 and 12 are based on the following passage.

The use of solar energy to produce electricity can be an excellent alternative to using fossil fuels. Solar panels give off no pollution, and, unlike other alternative energy sources such as wind turbines, are silent. One big advantage of solar energy is that it can harness *Line* electricity in remote locations that are not connected to a national grid. One example of this *5* is in space, where high-efficiency solar cells are used to power satellites. Although the initial investment for solar cells is high, once they are installed, they provide free electricity. Yet, unfortunately, this initial cost is one reason people are hesitant to embrace solar energy as an alternative energy source. Currently, a single solar panel can cost more than \$1,000, and some households may need more than one. Also, solar cells do not generate electricity *24* *10* hours a day, so excess electricity needs to be captured during daylight time for later use. The weather and pollution levels can also affect a solar cell's efficiency, which could have a huge impact on solar panels installed in cities. However, cost is still considered the main deterrent. Because fossil fuels still cost less than the initial investment for solar panels, it will likely be some time before we see a significant shift toward solar energy use.

11. Which of the following statements expresses the author's opinion about solar energy?
- A. Solar energy is an ideal alternative to using fossil fuels.
 - B. The main benefit of solar panels is that they can harness energy in remote locations.
 - C. Using solar panels is not a realistic alternative to fossil fuels because solar panels are too costly.
 - D. Using solar panels has great environmental benefits but it can also be prohibitively expensive and inefficient.
 - E. If it were not for the way weather and pollution interfere with their efficiency, solar panels would be the ideal energy generators

12. Which of the following, if it were true, would weaken the author’s conclusion?

- A. Fossil fuels and solar energy cost about the same.
- B. Solar panels will eventually be able to run 24 hours a day.
- C. Solar panels can sometimes create more noise than wind turbines.
- D. Many people who use solar panels are disappointed with the results.
- E. There are many alternatives to solar energy that are much cheaper.

Questions 13–15 are based on the following passage.

In the arena of dietary advice, science has produced some nutty conclusions. For the past two decades, multiple studies have drawn similar conclusions linking nut consumption to reduced risk of certain diseases, including hypertension, type-2 diabetes mellitus, and colon cancer. Studies have also shown reductions among nut eaters in many common and significant mediators of chronic diseases, such as inflammation, hyperglycemia, and insulin resistance.

More significantly, a study recently reported by the *New England Journal of Medicine* has found that nut consumption is “inversely associated with total and cause-specific mortality.” The study was conducted over the 30-year period spanning 1980 and 2010; used a cohort of some 20,000 nurses and other health professionals; and tracked other dietary and lifestyle factors, such as fruit and vegetable intake, meat and alcohol consumption, physical activity, age, and body mass index. The study’s authors concluded that those who ate more nuts were also leaner, got more exercise, ate more fruits and vegetables, and drank more alcohol. The conclusion of this and earlier studies is that nuts contribute to both good health and longevity.

Furthermore, these calorie-laden snacks have been shown to make their consumers leaner. Questions as to why the study found this may be answered in various ways—consumers eat them instead of snacks with even more calories, the body may treat nut calories differently than other calories, and nut consumers may just be more active or nutritionally conscious—or they elude definitive answers. But even if the possibility of a clear cause-and-effect relationship between nut consumption and svelteness is not enough of an enticement for more nut eating, the makeup of nuts should be. For example, nuts are an excellent source of omega-3 fatty acids that lower triglycerides, slow down the accretion of plaque, and lower blood pressure. They also contain phytochemicals and antioxidants thought to reduce the risk of certain cancers.

13. What is the most significant detail about the study reported by the *New England Journal of Medicine*?

- A. The study was conducted over a period of some thirty years.
- B. The study suggested a reduced rate of mortality for those who consumed nuts.
- C. The study suggested a decreased rate in the incidence of certain chronic diseases.
- D. The study suggested a cause-effect relationship between nut consumption and leanness.
- E. The study contradicted the claims of most nut studies conducted over the past two decades.

practice test 3

For Question 14, consider each answer individually and select all choices that apply.

14. What does the author suggest about studies that predate the study reported by the *New England Journal of Medicine*?
- A. They drew unsubstantiated conclusions about the effects of consuming nuts.
 - B. They showed how eating nuts contributes to the incidence of type-2 diabetes mellitus.
 - C. They showed how eating nuts mitigated against factors that may contribute to disease.
15. “Definitive” (line 18) most nearly means
- A. final.
 - B. inconclusive.
 - C. lexical.
 - D. equivocal.
 - E. defined.

For Questions 16–19, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

16. The gallery owner has a(n) _____ eye and an amazing ability to select the next hot artist from all the new artists who show him their portfolios.
- A. discerning
 - B. discriminating
 - C. detecting
 - D. investigative
 - E. observant
 - F. understanding
17. _____ data from the traffic safety survey shows a 17 percent increase in nonfatal pedestrian accidents due to texting drivers. The final report will be available next year.
- A. Improvised
 - B. Acting
 - C. Interim
 - D. Permanent
 - E. Terminal
 - F. Provisional

18. Scrooge has come to be considered the _____ miser from whom all similar characters are drawn.
- A. pattern
 - B. eccentric
 - C. archetypal
 - D. unusual
 - E. alternate
 - F. classic
19. The _____ tone of the singer's voice contributed to the song's melancholic mood.
- A. sonorous
 - B. lugubrious
 - C. resonant
 - D. neglected
 - E. doleful
 - F. deprived

Question 20 is based on the following passage.

For years astronomers could not figure out why the sun's outer atmosphere, or corona, is millions of degrees hotter than its surface, but recently NASA scientists came up with an answer. The corona consists of loops of hot gas that are thousands of miles high, but from *Line* Earth, the corona can be seen only during a total solar eclipse, which has made it difficult 5 to study. However, NASA scientists recently determined that nanoflares, tiny bursts of heat and energy, are what make the temperature so much hotter in the corona. The loops of gas are made up of bundles of smaller magnetic strands that can reach temperatures of several million degrees Kelvin, which is significantly hotter than the surface of the sun. NASA scientists created a simulation to see how nanoflares might occur and determined that the 10 million-degree temperatures in the corona could only be produced by impulsive energy bursts. However, the magnetic strands cool very quickly, which explains why this phenomenon had been so difficult to detect.

practice test 3

20. Select the sentence that best explains the recent discovery about the sun's corona.
- A. However, the magnetic strands cool very quickly, which explains why this phenomenon had been so difficult to detect.
 - B. The corona consists of loops of hot gas that are thousands of miles high, but from Earth, the corona can only be seen during a total solar eclipse, which has made it difficult to study.
 - C. For years astronomers could not figure out why the sun's outer atmosphere, or corona, is millions of degrees hotter than its surface, but recently NASA scientists came up with an answer.
 - D. The loops of gas are made up of bundles of smaller magnetic strands that can reach temperatures of several million degrees Kelvin, which is significantly hotter than the surface of the sun.
 - E. However, NASA scientists recently determined that nanoflares, tiny bursts of heat and energy, are what make the temperature so much hotter in the corona.

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.**

SECTION 3: VERBAL REASONING***30 minutes • 20 questions****(The paper-based version will have 25 questions to be completed in 35 minutes.)*

For each question, follow the specific directions and choose the best answer.

For Questions 1–5, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. In 1962, British composer Benjamin Britten created “War Requiem,” a piece he wrote in remembrance of World War II that would take on an unintended but more _____ significance as the Vietnam War escalated that same year.

A. evocative
B. overdue
C. contemporary
D. laudable
E. inscrutable

2. The Library of Congress recordings of American African folk songs recorded on location in the Deep South are considered the _____ versions against which musicologists evaluate all other versions.

A. indispensable
B. momentous
C. explicit
D. definitive
E. scholarly

3. At one end of the spectrum is Van Gogh’s (i) _____ life driven by the demons of madness and at the other end is Monet’s (ii) _____ life in his beloved garden at Giverny.

Blank (i)
A. turbulent
B. rowdy
C. boisterous

Blank (ii)
D. stoical
E. tranquil
F. bucolic

4. Ernest Hemingway was (i) _____ storyteller—an artist with words. He could paint (ii) _____ portrait of a proud young man locked in deadly combat with a ferocious bull and an equally (iii) _____ picture of a proud old man in his epic struggle with a giant fish.

Blank (i)
A. an accomplished
B. a consummate
C. a perfect

Blank (ii)
D. an impressive
E. an interesting
F. a stunning

Blank (iii)
G. glittering
H. riveting
I. conspicuous

practice test 3

5. The anthropologist's explanation for the difference in cultural traits had always seemed (i) _____, but they were later deemed (ii) _____ after new discoveries. His entire life's work was (iii) _____ by the academic community, and his career was in ruins.

Blank (i)

A. desirable
B. tenable
C. worthwhile

Blank (ii)

D. delusory
E. deceptive
F. specious

Blank (iii)

G. reneged
H. annulled
I. repudiated

For Questions 6–20, choose only one answer choice unless otherwise indicated.

Questions 6–8 are based on the following passage.

A meteoric rise in service sector jobs has characterized India's dynamic labor market over the past 15 years. In a paper for the National Bureau of Economic Research, Eichengreen and Gupta caution that this rise resulted from factors such as an extremely low starting *Line* point and dramatic increases in employment for those who are highly skilled, a group that makes up a tiny proportion of India's population. The two economists note that without a concomitant rise in manufacturing jobs—a sector that *Bloomberg News* described in early 2013, in a generally gloomy look at India's employment future, as "stagnated"—similar rates of growth cannot be sustained. The Manpower Employment survey for the next quarter of 2013, however, projected a 46% increase in jobs in the retail and trade sector, with the services *10* sector just 1 percentage point behind. The data, gathered from some 5,000 Indian employers, glowed with other similarly sunny figures for all sectors, including manufacturing.

6. Select the sentence that most likely states the author's opinion.
- A. New data make future meteoric growth in India's employment a certainty.
 - B. Without an increase in manufacturing jobs, India's economy will most likely falter.
 - C. Only high-tech service industry jobs are likely to solve India's employment problems.
 - D. Projected employment rates suggest a reversal of India's employment trends for the last 15 years.
 - E. Continued dramatic growth in India's employment rates may be illusory.
7. Which of the following sentences would serve as the most logical and relevant addition to the paragraph?
- A. India's economy has grown at one of the fastest rates in the world over the past fifteen years.
 - B. India's economy must be dominated by the high-tech service industry.
 - C. Data for actual employment rates in the next quarter may tell a significantly different story.
 - D. Loss of manufacturing jobs to globalization has not negatively impacted all developing countries.
 - E. India's "demographic dividend" cannot be cashed in unless more high-tech service sector jobs are created.

8. What would the author most likely predict or advise on the subject of employment in India in the future?
- A. Employment will continue to rise but at slightly less dramatic rates.
 - B. Gains in employment for most people must come from a reversal of manufacturing employment trends.
 - C. Employment in all sectors will remain stagnant no matter what some predictions say.
 - D. Decreases in employment will occur as employment in the high-tech service industry is saturated.
 - E. Employment will continue to rise in the manufacturing sector but not in the high-tech service industry.

Questions 9–11 are based on the following passage.

Until the late nineteenth century, a loophole in U.S. copyright law allowed publishers to reprint British books without paying royalties to the authors. Charles Dickens was among the many authors who were affected. Dickens was even more popular in the United States than *Line* he was in England, partly because of the availability of his works and their low prices in the ⁵ United States. When Dickens travelled to America for the first time in 1841, he wrote that “there never was a king or Emperor upon the Earth, so cheered, and followed by crowds.” Even so, during this visit he gave speeches calling for an international copyright law. The U.S. press, whose papers readily took advantage of free British content, were outraged. Editors took up their pens in an effort to convince the public that Dickens was ungrateful and greedy.
¹⁰ When he returned to England, Dickens published a critical book about his travels called *American Notes*, which included his outrage over his experience with the press. He also began a new novel, *Martin Chuzzlewit*, that details the adventures of a young man seeking his fortune in the United States. Dickens used the novel to seek revenge on the U.S. press. It satirized U.S. customs as well as the press, which ironically ran serialized installments of the ¹⁵ novel without compensating Dickens. *Martin Chuzzlewit* sold poorly in England, perhaps because it was so obviously aimed at the U.S. audience.

9. The author’s primary purpose in this passage is to
- A. emphasize how much Charles Dickens outraged the U.S. press.
 - B. explain Charles Dickens’s reaction to a U.S. copyright law and the U.S. press.
 - C. encourage writers to criticize unfair laws.
 - D. suggest that Charles Dickens was ungrateful and petty.
 - E. analyze Charles Dickens’s books *American Notes* and *Martin Chuzzlewit*.
10. Based on the passage, what was Dickens’s probable attitude toward Americans in general during his visit to the United States?
- A. Indebtedness
 - B. Belligerence
 - C. Dislike
 - D. Merciful
 - E. Ingratitude

practice test
3

11. According to the passage, what was Dickens's main reason for writing *Martin Chuzzlewit*?
- A. To write a book that would sell well in the United States
 - B. To make the United States change its existing copyright laws
 - C. To force U.S. publishers to sell his book in the United States
 - D. To attack Americans for their love of his novels
 - E. To show how he felt about the U.S. press

Questions 12 and 13 are based on the following passage.

Journalists rarely elicit art commentary from Isa Genzken, the famously interview-phobic German artist whose work was recently the subject of a Museum of Modern Art retrospective. Instead, Genzken's work must speak for her, though its message surely begins with the *Line prefix un-*, as in the word *unmonumental*, the title of an earlier show featuring Genzken's work. In its publicity for the recent show, MoMa extols Genzken, "who, with a new language of found objects and collage, has created several bodies of work that have redefined assemblage for a new era." Indeed, objects on display were innovative, if not generative. No matter what the size of the display, however, viewers had to find their own language for parts that are not wholes, for pieces that appear not to be connected, and for spaces that are seemingly not bounded.

For Question 12, consider each answer individually and select all choices that apply.

12. What do MoMa's words about "assemblage for a new era" suggest?
- A. That the artwork is assembled in a new way from found objects
 - B. That the artwork will be reassembled in many new ways in the future
 - C. That the artwork is representative of the present
13. What function do the two groups of words in bold type serve in this passage?
- A. The first presents an argument; the second presents support for the argument.
 - B. The first anticipates a conclusion; the second provides support for that conclusion.
 - C. The first presents an opinion; the second provides an additional opinion that supports the first.
 - D. The first serves as an intermediate conclusion; the second serves as the final conclusion.
 - E. The first supports an opinion; the second states the opinion.

Questions 14 and 15 are based on the following passage.

The American electoral system is commonly called a “two-party system” because there have historically been only two major political parties dominating electoral politics. Today, the Republican and Democratic Parties are the major two, but there are more than 30 other *Line* political parties active in the United States. One major role of third parties in the United States ⁵ has been to refocus the two major parties on issues they may have not dealt with effectively. Sometimes this happens when one of the major parties fears that a third party is going to become a viable alternative to a major party candidate, or will at least siphon off votes from that candidate during an election. At that point, what often happens is that the major party that feels threatened will take on certain policy positions of the third party in order to lure ¹⁰ more voters to it or keep voters from abandoning it. Third parties may also strengthen the government by giving those unhappy with the status quo a legitimate platform for demanding reform. In addition, third parties can simply be a welcoming place for people who want to belong to a group of like-minded people.

14. “Viable” (line 7) most nearly means

- A. versatile
- B. perceptible
- C. possible
- D. unpredictable
- E. controversial

For Question 15, consider each answer individually and select all choices that apply.

15. The author of the passage implies that third parties in the United States function in the electoral system by
- A. allowing people to vote for the candidate they believe in.
 - B. giving people a platform for radical ideas.
 - C. making the major parties rethink some of their policies.

practice test 3

For Questions 16–19, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

16. The _____ doctor of internal medicine received an honorary degree from his alma mater in further recognition of his humanitarian work in Zambia.
- A. humble
 - B. illustrious
 - C. brilliant
 - D. illustrative
 - E. celebrated
 - F. dignified
17. While the opposing candidate seemed intent on helping the rich become richer, the congresswoman made aiding the _____ a key component of her agenda.
- A. ineffectual
 - B. corruptible
 - C. insipid
 - D. indigent
 - E. problematic
 - F. underprivileged
18. The young people were not so _____ as their elders when it came to accepting the imposition of martial law including curfews beginning at 5 p.m.
- A. alterable
 - B. resilient
 - C. amenable
 - D. adaptable
 - E. tractable
 - F. movable
19. The teacher could barely contain his laughter when the student made the _____ request to cancel class for the day.
- A. delightful
 - B. ludicrous
 - C. refreshing
 - D. congenial
 - E. risible
 - F. abominable

Question 20 is based on the following passage.

Is the Fourth Estate, the theoretical fourth branch of the government that is the press, in jeopardy now that, first, overall news readership is declining even as online readership is increasing, and, second, digital media have gained apparent ascendancy over traditional print journalism? The answer may depend in part on whether the eye of the beholder views journalism, regardless of its form, largely as a disinterested public good, an evanescent medium for democratic comment, or a consumer product. Those holding to the highest ideal of the press as safeguard of our democracy will no doubt lament changes that make Twitter and the like as attractive as any news source. Those holding to the second vision will likely embrace the idea of up-to-the-minute, ever-fresh and evolving ideas and democratized commentary, while those holding to the third conception will bank on the more recent journalistic brands such as Buzzfeed and Politico that “sell” what has always been a product of capitalism. No matter what the perspective, however, it is indisputable that online journalism shifts power away from the publication, which in the era of print functioned as a kind of sentry at the gate of truth, appropriateness, and corporate interest, and transfers that power to the user.

20. Which of the following can be inferred from this passage?
- A. In the current age of digital media, the processes and products of journalism are more transitory than ever before.
 - B. The Fourth Estate has been eroded by new commercial interests that shift motivation from public good to profit.
 - C. The idea that the Fourth Estate is currently diminished by the ascendancy of digital media depends on a subjective view of the role of the press.
 - D. Journalism today exists largely beyond the realm of corporate interests and is characterized by a new democratizing impulse.
 - E. Journalism, regardless of the form it takes, should have a central purpose of serving democratic principles.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

practice test 3

SECTION 4: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

The test-maker provides the following information that applies to all questions in the Quantitative Reasoning section of the GRE® General Test:

- All numbers used are real numbers.
- All figures are assumed to lie in a plane unless otherwise indicated.
- Geometric figures, such as lines, circles, triangles, and quadrilaterals, *are not necessarily* drawn to scale. That is, you should *not* assume that quantities such as lengths and angle measures are as they appear in a figure. You should assume, however, that lines shown as straight are actually straight, points on a line are in the order shown, and more generally, all geometric objects are in the relative positions shown. For questions with geometric figures, you should base your answers on geometric reasoning, not on estimating or comparing quantities by sight or by measurement.
- Coordinate systems, such as xy -planes and number lines, *are* drawn to scale. Therefore, you can read, estimate, or compare quantities in such figures by sight or by measurement.
- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.

Quantity A

$$\frac{5}{\left(\frac{1}{5}\right)^2}$$

Quantity B

125

- 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.

practice test 3

2.

Quantity A

$$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5}$$

Quantity B

1

- 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.

3.

$$x > 1$$

Quantity A

$$\left(\frac{1}{x}\right)^2$$

Quantity B

$$x^{-3}$$

- 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.

4.

$$a > b > 0 > c > d$$

Quantity A

$$a+d$$

Quantity B

$$b+c$$

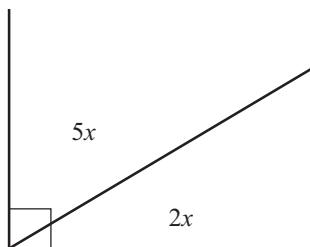
- A. Quantity A is greater.
- B. Quantity B is greater.
- C. The two quantities are equal.
- D. The relationship cannot be determined from the information given.

5.

Let S be a square with perimeter 24 feet.Quantity ALength of a diagonal of S Quantity BLength of a side of S

- 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.

6.

Quantity A x Quantity B

15

- 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.

7.

 $x \neq 0$ Quantity A

$$x^{-3}(x^3)$$

Quantity B

$$\frac{1}{x^{-3}(x^3)}$$

- 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.

8. Sam is 3 times as old as Sue. In 5 years Sam will be 12 years older than twice Sue's age.

Quantity A

Sue's age

Quantity B

22

- 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.

Practice test 3

Practice Test 3

Questions 9–20 have several formats. Unless the directions state otherwise, choose one answer choice. For the Numeric Entry questions, follow the instructions below.

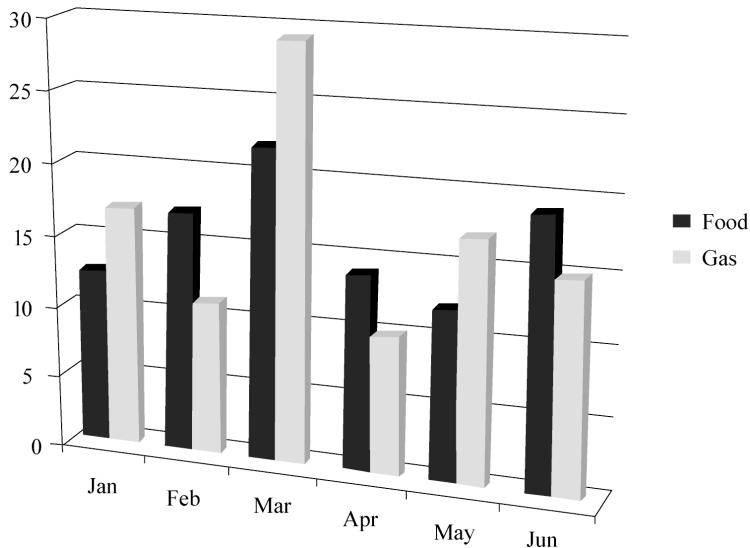
Numeric Entry Questions

The following items are the same for both the computer-based version and the paper-based version of the test. However, those taking the computer-based version will have additional information about entering answers in decimal and fraction boxes on the computer screen. Those taking the paper-based version will have information about entering answers on answer grids.

- Your answer may be an integer, a decimal, or a fraction, and it may be negative.
- If a question asks for a fraction, there will be two boxes. One box will be for the numerator and one will be for the denominator.
- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

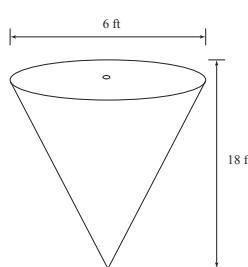
Questions 9–11 refer to the bar graph below.

Average Daily Use Per Salesperson
(rounded to the nearest dollar)



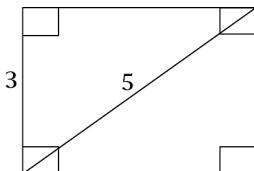
9. If there are 33 salespeople in the company, what was the approximate total spent on food and gas for January?
- \$24,765
 - \$25,575
 - \$29,865
 - \$35,805
 - \$36,905

10. In February, the company had an outlay of \$21,056 for food. How many salespeople did the company employ for the month?
- A. 28
B. 47
C. 56
D. 73
E. 75
11. The projections for the coming year indicate an increase of 10 percent in the average cost of gas. How much more per day will the company pay out on average for gas for the first 6 months of next year?
- A. \$9
B. \$12
C. \$15
D. \$18
E. \$21
12. The frame shop has a rectangular mat 36" by 22". If a mat is cut from it that is 2" less all the way around, what is the area of the new mat?
- A. 576 square inches
B. 680 square inches
C. 648 square inches
D. 792 square inches
E. 822 square inches
13. What is the volume of the given cone?



- A. 54π cubic feet
B. 108π cubic feet
C. 162π cubic feet
D. 216π cubic feet
E. 648π cubic feet

14. Find the perimeter of the figure.



- A. 7
B. 8
C. 14
D. 16
E. 30
15. The original price of a shirt was \$40. It was marked down twice before it was sold. First it was marked down 20%, and then it was marked down 15% of its discounted price. What percentage of the original price did it sell for?
A. 32%
B. 48%
C. 68%
D. 80%
E. 85%
16. What is the mean height of 6 trees when one is 25 feet tall, two are each 14.5 feet tall, and three are 24 feet tall?
A. 16 feet
B. 18 feet
C. 21 feet
D. 22 feet
E. 23 feet

For Questions 17 and 18, choose all the answers that apply.

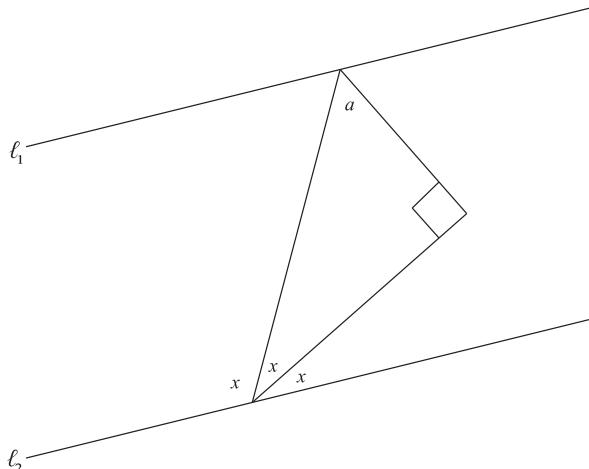
17. The first term, r_1 , of a sequence is 1, and the n th term of the sequence is given by the formula $r_n = r_{n-1} + 7$. Which of the following are terms of the sequence?
A. 7
B. 15
C. 20
D. 57
E. 63

practice test 3

18. If $x(2x - 5) = 3$, what are the possible values for x ?

- A. 3
- B. $\frac{5}{2}$
- C. $-\frac{1}{2}$
- D. $\frac{2}{5}$
- E. -3

For Questions 19 and 20, enter your answers in the boxes.



19. Lines 1 and 2 are parallel. What is the value of a ?

20. In the barber shop, a haircut costs \$22.50. How many haircuts must be done to cover the monthly rent of \$1,276? Round the answer up to the nearest haircut.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

SECTION 5: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

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- All figures are assumed to lie in a plane unless otherwise indicated.
- Geometric figures, such as lines, circles, triangles, and quadrilaterals, *are not necessarily* drawn to scale. That is, you should *not* assume that quantities such as lengths and angle measures are as they appear in a figure. You should assume, however, that lines shown as straight are actually straight, points on a line are in the order shown, and more generally, all geometric objects are in the relative positions shown. For questions with geometric figures, you should base your answers on geometric reasoning, not on estimating or comparing quantities by sight or by measurement.
- Coordinate systems, such as xy -planes and number lines, *are* drawn to scale. Therefore, you can read, estimate, or compare quantities in such figures by sight or by measurement.
- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.

$$w < x < y < z$$

Quantity A
 $w + y$

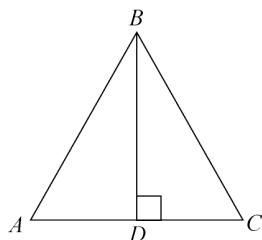
Quantity B
 $x + z$

- 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.

practice test 3

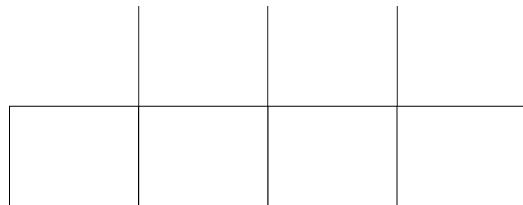
2. Quantity A Quantity B
 The number of dimes in \$5.10 The number of pennies in 2 quarters
- A. Quantity A is greater.
 B. Quantity B is greater.
 C. The two quantities are equal.
 D. The relationship cannot be determined from the information given.
3. Quantity A Quantity B
 $\frac{4}{3}\left(\frac{1}{2}\right)\left(\frac{11}{9}\right)$ $\frac{3}{4}\left(\frac{15}{16}\right)\left(\frac{15}{12}\right)$
- 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.
4. $x < y < 0$
 Quantity A Quantity B
 $x + y$ $x - y$
- 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.
5. Given triangle ABC
 Where $AB = BC = CA$
 Quantity A Quantity B
 Value of an interior angle 60°
- 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.

6.

Quantity A $\angle A$ Quantity B $\angle C$

- 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.

7. The shape below is made up of 5 congruent squares. The area of the shape is 180.

Quantity A

84

Quantity B

The perimeter of the shape

- 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.

8.

Quantity A

$$\frac{1}{1,000}\%$$

Quantity B

$$10^{-5}$$

- 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.

practice test 3

Questions 9–20 have several formats. Unless the directions state otherwise, choose one answer choice. For the Numeric Entry questions, follow the instructions below.

Numeric Entry Questions

The following items are the same for both the computer-based version and the paper-based version of the test. However, those taking the computer-based version will have additional information about entering answers in decimal and fraction boxes on the computer screen. Those taking the paper-based version will have information about entering answers on answer grids.

- Your answer may be an integer, a decimal, or a fraction, and it may be negative.
- If a question asks for a fraction, there will be two boxes. One box will be for the numerator and one will be for the denominator.
- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

9. If a salesperson receives a \$5,500 commission on the sale of a yacht, how much did the yacht sell for if the commission rate is 5%?
- A. \$110
B. \$1,100
C. \$11,000
D. \$110,000
E. \$1,100,000
10. Working at their respective rates, Masha can paint a given apartment in x hours, and Olga can paint it in y hours. If Masha and Olga work together, each at her own rate, in how many hours will they paint the apartment?
- A. $x + y$
B. $\frac{x + y}{xy}$
C. $\frac{xy}{y + x}$
D. $\frac{1}{xy}$
E. $\frac{1}{x + y}$

Practice test 3

Practice Test 3

For Question 11, enter your answer in the box.

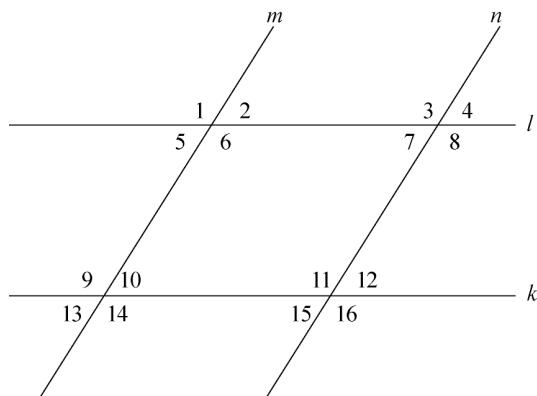
11. If 1 knot is approximately equal to 1.15 miles per hour, to how many feet per minute is it equivalent?

feet per minute

12. Evaluate $27^{\frac{2}{3}}$.

- A. 3
- B. 9
- C. 18
- D. 27
- E. 81

Questions 13 and 14 refer to the figure below.



m is parallel to n , and k is parallel to l .

13. If $m\angle 3 = 2x$, and $m\angle 10 = 63$, find the value of x .

- A. 58.5
- B. 63
- C. 72
- D. 117
- E. 119.5

14. In the parallelogram formed by the intersection of the lines, what is the sum of the measures of the interior angles?

- A. < 270
- B. < 360
- C. 360
- D. > 360
- E. > 540

Question 15 refers to the table below.

PURCHASING-POWER PARITY (PPP)

Rank	Country	PPP Total (billion)	PPP/capita (\$)	Population (million)
1.	European Union	10,840	28,600	379
2.	USA	10,400	37,600	290
3.	China	5,700	4,400	1,287
4.	Japan	3,550	28,000	127
5.	India	2,660	2,540	1,049
6.	Germany	2,180	26,600	82
7.	France	1,540	25,700	60
8.	Britain	1,520	25,300	60
9.	Italy	1,440	25,000	57
10.	Russia	1,350	9,300	144
11.	Brazil	1,340	7,600	182

15. Which country in the bottom 5 of population has the highest PPP Total?

- A. Italy
- B. Britain
- C. France
- D. Germany
- E. Japan

16. What is the first month's interest payment on a 1-year loan of \$34,000 at 8.28%?

- A. \$234.60
- B. \$242.90
- C. \$281.52
- D. \$2,346
- E. \$2,815.20

practice test 3

For Questions 17 and 18, choose all the answers that apply.

17. If m , n , and p are positive integers, and m is a factor of n , and n is a factor of p , which of the following statements are true?
- A. m is a factor of p
B. n is a factor of p^3
C. p is the product of $m(n)$
D. n is a factor of $m(p)$
18. Consider the sequence whose n th term is $a_n = \frac{(-1)^{n-1}n}{n+1}$. Which of the following are the 4th, 5th, and 6th terms of this sequence?
- A. $-\frac{4}{5}$
B. $\frac{4}{5}$
C. $-\frac{5}{4}$
D. $\frac{5}{4}$
E. $-\frac{5}{6}$
F. $\frac{6}{7}$
G. $\frac{5}{6}$
H. $-\frac{6}{7}$

For Questions 19 and 20, enter your answers in the boxes.

19. It takes 3 electricians four 8-hour days to wire a house. If the general contractor wanted the house wired in three 8-hour days, how many electricians should he have hired?

20. The length of a rectangle is equal to two less than three times its width. If its perimeter is 172 inches, what is the length of the rectangle?

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

Practice Test 4

The test begins with general information about the number of sections on the test (six for the computer-based version, including the unidentified unscored section or an identified research section, and five for the paper-based version) and the timing of the test (approximately 3 hours and 45 minutes, including one 10-minute break after Section 3, 1-minute breaks after the other sections for the computer-based version, and 3 hours and 30 minutes for the paper-based version with similar breaks). The following practice test contains the five scored sections.

Each section has its own time allocation and, during that time period, you may work on only that section.

Next, you will read ETS's policy on scoring the Analytical Writing responses. Each essay is read by experienced readers, and ETS may cancel any test scores that show evidence of unacknowledged use of sources, unacknowledged collaboration with others, preparation of the response by another person, and language that is "substantially" similar to the language in one or more other test responses.

Each section has specific instructions for that section.

You will be told when to begin.

Practice Test
4



PRACTICE TEST 4 ANSWER SHEETS

Section 1: Analytical Writing

Analyze an Issue

FOR PLANNING



Analyze an Argument

FOR PLANNING

answer sheet



Section 2: Verbal Reasoning

- | | | |
|----------------------|-----------------|-----------------|
| 1. A B C D E | 11. A B C D E | 16. A B C D E F |
| 2. A B C D E | 12. A B C D E | 17. A B C D E F |
| 3. A B C D E F | 13. A B C D E | 18. A B C D E |
| 4. A B C D E F | 14. A B C D E | 19. A B C |
| 5. A B C D E F G H I | 15. A B C D E F | 20. A B C D E |
| 6. A B C D E | | |
| 7. A B C D E | | |
| 8. A B C D E | | |
| 9. A B C | | |
| 10. A B C D E | | |

Section 3: Verbal Reasoning

- | | | |
|----------------------|---------------|-----------------|
| 1. A B C D E | 11. A B C D E | 16. A B C D E F |
| 2. A B C D E | 12. A B C | 17. A B C D E F |
| 3. A B C D E F | 13. A B C D E | 18. A B C D E F |
| 4. A B C D E F G H I | 14. A B C D E | 19. A B C D E F |
| 5. A B C D E F G H I | 15. A B C D E | 20. A B C |
| 6. A B C D E | | |
| 7. A B C D E | | |
| 8. A B C | | |
| 9. A B C D E | | |
| 10. A B C D E | | |

Section 4: Quantitative Reasoning

- | | | |
|---------------|---------------|-----------------|
| 1. A B C D | 11. A B C D E | 16. A B C D E |
| 2. A B C D | 12. A B C D E | 17. A B C D E F |
| 3. A B C D | 13. A B C D E | 18. A B C D E |
| 4. A B C D | 14. A B C D E | 19. [] |
| 5. A B C D | 15. A B C D E | 20. [] |
| 6. A B C D | | |
| 7. A B C D | | |
| 8. A B C D | | |
| 9. A B C D E | | |
| 10. A B C D E | | |

**Section 5: Quantitative Reasoning**

- | | | |
|---------------|---------------|--------------------------|
| 1. A B C D | 11. A B C D E | 16. A B C D E F |
| 2. A B C D | 12. A B C D E | 17. A B C D E |
| 3. A B C D | 13. A B C D E | 18. <input type="text"/> |
| 4. A B C D | 14. A B C D E | 19. <input type="text"/> |
| 5. A B C D | 15. A B C D E | 20. <input type="text"/> |
| 6. A B C D | | |
| 7. A B C D | | |
| 8. A B C D | | |
| 9. A B C D | | |
| 10. A B C D E | | |

answer sheet

SECTION 1: ANALYTICAL WRITING

Analyze an Issue

30 minutes

The time for this task is 30 minutes. You must plan and draft a response that evaluates the issue given below. If you do not respond to the specific issue, your score will be zero. Your response must be based on the accompanying instructions, and you must provide evidence for your position. You may use support from reading, experience, observations, and/or course work.

Many students today have their own cell phones and take them everyplace they go. This becomes a problem when they bring them into the classroom. Schools should completely ban the presence of cell phones in the classroom.

Write a response that takes a position on this proposed policy. As you explain and support your position, also discuss how the likely results or consequences of the policy help to shape your position.

Your response will be read by experienced readers who will assess your ability to do the following:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based version of the GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

practice test 4

Analyze an Argument

30 minutes

The time for this task is 30 minutes. You must plan and draft a response that evaluates the argument given below. If you do not respond to the given argument, your score will be zero. Your response must be based on the accompanying instructions and you must provide evidence in support of your analysis.

You should not present your views on the subject of the argument but on the strength or weakness of the argument.

The city council's decision to raze four massive residential city blocks in our city center and replace them with new affordable housing is both shortsighted and too costly in both human and economic terms. A more logical and cost-effective solution to the problem of abandoned and ramshackle buildings—and an entire neighborhood in crisis—is to turn the abandoned lots on those blocks into community gardens or urban farms. Once this is accomplished, falling construction, garbage dumps, and sites for nefarious activities will be transformed into beckoning open space. Such a change will help regenerate the entire area by bringing life and beauty to a devastated urban core and by eventually sparking urban pioneering and renewal.

Write a response that discusses the questions that would have to be answered in order to further determine the reasonableness of the recommendation and the argument on which it is based. Be sure to explain how the answers to the questions would help to determine whether the argument and recommendation are reasonable.

Your response will be read by experienced readers who will assess your ability to do the following:

- Follow the set of task instructions.
- Analyze the complexities involved.
- Organize, develop, and explain ideas.
- Use pertinent reasons and/or illustrations to support ideas.
- Adhere to the conventions of Standard Written English.

You will be advised to take some time to plan your response and to leave time to reread it before the time is over. Those taking the paper-based version of the GRE® General Test will find a blank page in their answer booklet for making notes and then four ruled pages for writing their actual response. Those taking the computer-based version will be given scrap paper for making notes.

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YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

INSTRUCTIONS FOR THE VERBAL REASONING AND QUANTITATIVE REASONING SECTIONS

You will find information here on the question formats for the Verbal Reasoning and Quantitative Reasoning sections, as well as information about how to use the software program, or, if you're taking the paper-based version, how to mark your answers in the answer booklet.

Perhaps the most important information is a reminder about how these two sections are scored. Every correct answer earns a point, but points are not subtracted for incorrect answers. The advice from ETS is to guess if you aren't sure of an answer. ETS says that this is better than not answering a question.

All multiple-choice questions on the computer-based test will have answer options preceded by either blank ovals or blank squares, depending on the question type. The paper-based test will follow the same format for answer choices, but it will use letters instead of ovals or squares for answer choices.

For your convenience in answering questions and checking answers, this book uses letter designations (A, B, C, etc.) for answer choices. Having these letters to refer to will make it easier for you to check your answers against the answer key and explanation sections.

SECTION 2: VERBAL REASONING***30 minutes • 20 questions****(The paper-based version will have 25 questions to be completed in 35 minutes.)*

For each question, follow the specific directions and choose the best answer.

For Questions 1–5, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. The managing partner of the investment company _____ its yearly earnings in a speech broadcast by satellite to financial analysts around the world. He was ebullient over the results.

A. announced
B. boasted about
C. declared
D. stated
E. took satisfaction in

2. The union leader had to raise his voice to plead with the _____ audience to settle down several times so that he could continue his speech.

A. disturbed
B. disagreeable
C. attentive
D. vociferous
E. stringent

3. Motivated by the (i) _____ national debt, lawmakers after years of discussion, agreed to eliminate earmarks for local programs from the budget. The consequences touched a (ii) _____ of projects from sewer treatment plants to widening of roadways.

Blank (i)

A. burgeoning
B. emerging
C. sprouting

Blank (ii)

D. panoply
E. plethora
F. diversity

4. In recent recessions economists have noted (i) _____ known as a jobless recovery. A comparison of data shows that the economy begins to grow before the number of jobs increases. This is a(n) (ii) _____ divergence from previous recoveries.

Blank (i)

A. a phenomenon
B. an episode
C. an omen

Blank (ii)

D. imperceptible
E. precise
F. pronounced

practice test 4

5. There was a time when scholars did not (i) _____ the origin and nature of comets. In fact, no less a respected thinker than Aristotle (ii) _____ that comets were meteors trapped between the earth and moon and generated by the earth's rising temperatures. René Descartes's theories were even more (iii) _____; the French scientist and philosopher thought comets were messengers from other galaxies.

Blank (i)	Blank (ii)	Blank (iii)
A. contemplate	D. rhapsodized	G. ostentatious
B. fathom	E. speculated	H. outlandish
C. descry	F. interrogated	I. innovative

For Questions 6–20, choose only one answer choice unless otherwise indicated.

Questions 6–8 are based on the following passage.

Luigi Pirandello's 1921 play *Six Characters in Search of an Author* may be considered the first existentialist drama. The play explores the relationship between imaginary characters and the writer who has created them. The premise of the play is that six characters have taken *Line* on lives of their own because their author has failed to complete their story. The characters 5 invade a rehearsal of another play by Pirandello and insist on acting out their lives. Somehow there is an immutable reality for these six characters, despite the fact that they are merely the fabrications of a writer. As the play's structure begins to break down, the characters begin to question how anyone can tell when reality ends and pretense begins. Pirandello leaves his audience wondering the same thing.

6. The passage provides information on each of the following EXCEPT:
- A. The significance of *Six Characters in Search of an Author*
 - B. The premise of *Six Characters in Search of an Author*
 - C. The influence of *Six Characters in Search of an Author*
 - D. The reaction to *Six Characters in Search of an Author*
 - E. The characters of *Six Characters in Search of an Author*
7. "Immutable" (line 6) most nearly means
- A. variable.
 - B. enclosed.
 - C. unsure.
 - D. flexible.
 - E. enduring.
8. Select the sentence in the passage in which the author provides a succinct description of Pirandello's play.
- A. Luigi Pirandello's 1921 play *Six Characters in Search of an Author* may be considered the first existentialist drama.

- B. The characters invade a rehearsal of another play by Pirandello and insist on acting out their lives.
- C. Somehow there is an immutable reality for these six characters, despite the fact that they are merely the fabrications of a writer.
- D. The premise of the play is that six characters have taken on a life of their own because their author has failed to complete their story.
- E. As the play's structure begins to break down, the characters begin to question how anyone can tell when reality ends and pretense begins.

Questions 9 and 10 are based on the following passage.

"Fifty Years After the Equal Pay Act" is a U.S. government report on the effects of the landmark legislation of the Kennedy Administration. The document details multiple improvements and successes, as women have now integrated most fields of endeavor formerly reserved *Line* for men; furthermore, they have risen to the highest levels of achievement in them, attaining 5 formerly unheard of positions such as CEO, Supreme Court Justice, and Secretary of State. Women have also moved in large and ever-increasing numbers into the ranks of the nation's entrepreneurs; moreover, they have dramatically increased their presence among the nation's upper echelons of earners.

Nevertheless, the report also shows that high-profile success stories belie grimmer facts 10 about where women stand in the workplace and economically overall. As the report notes, while overtly discriminatory practices, such as "female worker wanted" ads, have ended, occasional occupational segregation and other barriers to equality persist. Most tellingly, the majority of women currently earns just 77 cents for every dollar earned by men (an 18-cent gain over 1963, made smaller by the fact that many men are now earning less) and 15 disproportionately fills the ranks of low-income jobs, including childcare workers, cashiers, and maids. In fact, a current catchphrase among activists that captures the reality of both low-income jobs and the increasing number of households headed by single women is the "feminization of poverty."

For Question 9, consider each answer individually and select all choices that apply.

- 9. Which of the following statements is or are supported by the passage?
 - A. Occupational segregation has finally been eliminated.
 - B. The 18-cent gain in pay is not as great as the numbers suggest.
 - C. Increases in high-profile jobs demonstrate the end of income inequality.
- 10. The author mentions the "feminization of poverty" in order to
 - A. provide a possible explanation for other details in the passage.
 - B. provide support for the main findings of the report.
 - C. introduce an overarching counterpoint to all claims of progress.
 - D. weaken the main point of the government's report.
 - E. contrast this detail with earlier information in the paragraph.

practice test 4

Questions 11 and 12 are based on the following passage.

Can the center of the Eurozone hold? Economic crises have undermined the Eurozone since 2007, and while their effects have been less publically visible lately than they were in 2012, when the economic alliance appeared ready to implode, their repercussions are not *Line* over. Rising distrust of the Eurozone felt by southern Eurozone countries, including Spain, ⁵ Italy, Cyprus, Greece, and France, appears to be due to the continuing recessionary trends these nations are experiencing, as well as increases in income disparity and persistent unemployment fostered by the crises. For these reasons, some experts forecast structural change in these governments as economic crisis brews democratic crisis. Meanwhile, a marked divergence in the wealth of northern Eurozone countries, especially Germany, creates an ¹⁰ unsustainable binary division.

11. The passage mentions each of the following EXCEPT:
 - A. The problems of rising mistrust of the Eurozone
 - B. The recent changes in public perception of Eurozone issues
 - C. The near destruction of the Eurozone in 2012
 - D. The relationship between economics and democratic regimes
 - E. The unsuitability of austerity measures at this time

12. Based on the information provided in the passage, what does the author most likely think regarding the Eurozone?
 - A. The Eurozone is a powerful and effective entity that works equally well for all member nations, and should persist in its current form.
 - B. The Eurozone is an unstable entity that has been undermined by a host of crises, with varying and questionable benefits for member nations.
 - C. The Eurozone needs to include additional member nations of varying wealth, resource, and prosperity levels, in order to fulfill its goals.
 - D. The Eurozone would be more successful if all group members would agree to a more homogenous blending of their cultures, languages, interests, and goals.
 - E. The author likely doesn't have an opinion regarding the success of the Eurozone, or lack thereof.

Questions 13 and 14 are based on the following passage.

By the end of World War II, European countries were eager to pursue an economic and political amalgamation in order both to increase prosperity in the region and to foster a sense of unity. The European Union, whose origins can be traced to the 1950s, was officially *Line* established in 1993. The creation of the Eurozone in 1999 further solidified economic ties ⁵ between certain European countries. The Eurozone originally consisted of 11 countries, but now includes 17, both in Western and Eastern Europe. Every country that is in the Eurozone must use the euro as its sole legal currency. Monetary rules for the Eurozone are created and maintained by the European Central Bank. Currently, member states have to abide by the rules of the Stability and Growth Pact that was first adopted in 1997. They cannot exceed ¹⁰ an annual budget deficit of 3 percent of the gross domestic product or have an inflation rate

practice test 4

over 2 percent. In addition, all Eurozone countries must maintain a national debt lower than 60 percent of their gross domestic product.

13. The author's primary purpose in the passage is to
 - A. present an overview of the Eurozone.
 - B. analyze the rules of the Stability and Growth Pact of the Eurozone.
 - C. suggest alternatives to some of the Stability and Growth Pact's rules.
 - D. emphasize the importance of the Eurozone.
 - E. show why other countries should join the Eurozone.
14. "Amalgamation" (line 2) most nearly means
 - A. combination.
 - B. severance.
 - C. melting.
 - D. variance.
 - E. anomaly.

For Questions 15–18, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

15. The job applicant was _____ in his interview by not telling the interviewer about his lack of credentials.
 - A. invidious
 - B. disingenuous
 - C. artless
 - D. clandestine
 - E. devious
 - F. indirect
16. Studies of the age-old _____ of nature versus nurture have resulted in some interesting results. Studies of identical and fraternal twins have indicated that a sense of humor is the result of nurture rather than nature.
 - A. paradox
 - B. provocation
 - C. enigma
 - D. challenge
 - E. conundrum
 - F. paradigm

17. Mulling over the various plans for the reorganization of the sales department, the vice president and the HR director finally and _____ chose the plan that laid off the most salespeople but kept the benefits at the same level for those who were left.
- A. timidly
 - B. diffidently
 - C. reticently
 - D. stingily
 - E. hesitantly
 - F. reluctantly
18. At first the _____ of spending the week in a rustic cabin without electricity or even indoor plumbing was off putting to the children, but they eventually came to enjoy the adventurous novelty of it.
- A. audaciousness
 - B. quaintness
 - C. austerity
 - D. complacency
 - E. starkness

Questions 19 and 20 are based on the following passage.

Groundwater contamination arises when groundwater becomes polluted by various substances, including chemicals, medications, bacteria, viruses, fertilizer, and fuel. Groundwater contamination can also come from polluted runoff from farms or when factories dump manufacturing wastes in waterways. Once groundwater becomes contaminated, it can be very difficult to remove the contaminants. Sometimes filtration systems can be used, but in other cases, the groundwater may be so polluted as to be rendered undrinkable. Since much of the world's supply of drinking water comes from groundwater, contamination is a serious issue. In communities in some places in the world that cannot afford other sources of water, people may have no other choice than to drink contaminated groundwater with its consequent serious side effects.

For Question 19, consider each answer individually and select all choices that apply.

19. It can be inferred from the passage that the author would agree with which of the following statements?
- A. Groundwater contamination should be an important consideration of municipal governments.
 - B. People should consider using alternate sources of water whenever possible.
 - C. Once groundwater contamination is detected, it must be addressed.

20. Select the sentence in the passage that best establishes the author's position.
- A. Groundwater contamination can also come from polluted runoff from farms or when factories dump manufacturing wastes in waterways.
 - B. Since much of the world's supply of drinking water comes from groundwater, contamination is a serious issue.
 - C. Once groundwater becomes contaminated, it can be very difficult to remove the contaminants.
 - D. Sometimes filtration systems can be used, but in other cases, the groundwater may be so polluted as to be rendered unpotable.
 - E. In communities in some places in the world that cannot afford other sources of water, people may have no other choice than to drink contaminated groundwater with its consequent serious side effects.

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.**

practice test 4

SECTION 3: VERBAL REASONING

30 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 35 minutes.)

For each question, follow the specific directions and choose the best answer.

For Questions 1–5, choose one answer for each blank. Select from the appropriate column for each blank. Choose the answer that best completes the sense of the text.

1. Although he is among the twenty best-selling authors of all time, Stephen King has rarely received the critical _____ his more literary-minded peers have enjoyed.

A. drubbing
B. approximation
C. accolades
D. souvenirs
E. amenities

2. Mechanical weathering, which breaks down rock, includes a number of processes. One is caused by the _____ quality of rock particles. The particles rushing by in water or carried by the wind break down the rocks with which they come in contact.

A. coarse
B. rough
C. rasping
D. grating
E. abrasive

3. Critics may consider his style (i)_____ of the worst in advertising art, but he charges (ii)_____ prices for his representational paintings and makes a fortune.

Blank (i)	Blank (ii)
A. derivative	D. munificent
B. a by-product	E. magnanimous
C. a complement	F. exorbitant

4. The (i)_____ view of many Americans for years was that the 1950s were a time of peace and prosperity. However, this (ii)_____ version of the time period is (iii)_____ by the racial unrest that erupted in the latter part of the decade.

Blank (i)	Blank (ii)	Blank (iii)
A. prevailing	D. implied	G. concealed
B. hypothetical	E. epic	H. misrepresented
C. academic	F. fictional	I. belied

5. His grades in school never seemed (i) _____ with his intelligence, and this (ii) _____ assessment was borne out in his later work life. Known for his (iii) _____ ability to penetrate to the core issues, he rose to become CEO of a Fortune 1000 company.

Blank (i)	Blank (ii)	Blank (iii)
A. congenial	D. astute	G. laser-like
B. commensurate	E. practiced	H. discerning
C. complaisant	F. adroit	I. caustic

For Questions 6–20, choose only one answer choice unless otherwise indicated.

Questions 6–8 are based on the following passage.

American artist Mary Cassatt (1845–1926) is noteworthy for being one of the few women artists to succeed professionally during the late nineteenth century. Because of her friendship with Edgar Degas, she was the only American to take part in the 1879 exhibition of French *Line* Impressionist artists in Paris. Though Cassatt's style was influenced by the Impressionists, ⁵ she developed her own unique style and subject matter. It is easy to see the influence of Degas in her paintings, but her interest in Japanese prints is also reflected in many of her paintings. Much of her earliest work portrays women engaging in home activities, such as reading, sewing, or writing letters. After the French exhibition, Cassatt began to explore what she eventually became famous for: paintings of women caring for children. It is through these ¹⁰ paintings that Cassatt highlights the often overlooked role in painting of women as mothers.

6. Select the sentence in the passage in which the author notes influences on Cassatt's style.
- A. After the French exhibition, Cassatt began to explore what she eventually became famous for: paintings of women caring for children.
 - B. It is easy to see the influence of Degas in her paintings, but her interest in Japanese prints is also reflected in many of her paintings.
 - C. Much of her earliest work portrays women engaging in home activities, such as reading, sewing, or writing letters.
 - D. It is through these paintings that Cassatt highlights the often overlooked role in painting of women as mothers.
 - E. Because of her friendship with Edgar Degas, she was the only American to take part in an 1879 exhibition of French Impressionist artists in Paris.
7. The author suggests that Cassatt's work
- A. was utterly original.
 - B. depicted uncommon feats.
 - C. was politically motivated.
 - D. focused on everyday activities.
 - E. was influenced by Edgar Degas.

practice test
4

For Question 8, consider each answer individually and select all choices that apply.

8. Which of the following statements is supported by the passage?
- A. Mary Cassatt began to paint women and children as a way to express her frustration with contemporary male artists.
 - B. Mary Cassatt was inspired by several artistic styles from different parts of the world.
 - C. Mary Cassatt expressed a unique perspective through her art.

Questions 9 and 10 are based on the following passage.

Modest Mussorgsky was one of a group of Russian composers known as “The Five” or “The Mighty Handful,” whose goal in the late 1800s was to create Russian nationalist music. Mussorgsky’s most famous work, the opera *Boris Godunov*, completed in 1873, is the story *Line* of the powerful, though flawed Russian tsar who ruled in the early seventeenth century. The ⁵ opera met with negative criticism from some of Mussorgsky’s contemporaries. Another member of “The Five,” Nicolai Rimsky-Korsakov, said of *Boris Godunov* that “I adore it for its originality, power, boldness, distinctiveness, and beauty; I abhor it for its lack of polish, the roughness of its harmonies, and, in some places, the sheer awkwardness of the music.” Because of this, Rimsky-Korsakov revised the opera after Mussorgsky’s death at age forty-¹⁰ one in 1881, correcting what he believed were technical weaknesses in the original score. Rimsky-Korsakov’s revised version of *Boris Godunov* became the preferred edition of the opera. In recent years, however, Mussorgsky’s unique style and orchestration have come to be appreciated, even celebrated, and his is the version that opera-goers are more likely to see performed.

9. “Nationalist” (line 2) most nearly means
- A. loyalty to one’s country.
 - B. dedicated to the interests or culture of a nation.
 - C. love of one’s country.
 - D. isolationist.
 - E. separatist.
10. The author’s primary purpose in the passage is to
- A. describe the creation and evolving critical opinions of Mussorgsky’s opera *Boris Godunov*.
 - B. argue that his peers and critics treated Mussorgsky unfairly during his lifetime.
 - C. explain why Mussorgsky wrote the opera *Boris Godunov*.
 - D. suggest that Mussorgsky’s *Boris Godunov* was highly flawed until Rimsky-Korsakov revised it.
 - E. analyze the national conditions that made Mussorgsky’s opera *Boris Godunov* possible.

Questions 11–13 are based on the following passage.

Despite advances in medicine and technology, the demand for organ transplants remains much greater than the number of organ donors available. Ironically, this is mainly because of the increasing success rate of organ transplant operations over the years. Early transplant operations often failed because patients' immune systems rejected the foreign organ. However, the introduction of the drug cyclosporine in the 1980s helped solve this problem, and organ transplants subsequently became much more routine, which, in turn, resulted in the need for more organ donations.

Researchers looking for a way to solve this problem have begun to work on developing artificial organs, **though this is still in a highly experimental phase**. So far, laboratories around the world have developed artificial hearts, lungs, livers, and other organs, but with only limited success. Other scientists are working on techniques to grow organs from a patient's own cells, **which could ultimately eliminate the need for organ donors**. Yet because this involves cloning and stem cell research, it also raises ethical questions that make this a much more complicated issue than developing artificial organs.

11. What function do the two groups of words in bold type serve in this passage?
 - A. The first presents an argument; the second reinforces the argument.
 - B. The first presents an opinion; the second presents final support for the opinion.
 - C. The first serves as an intermediate conclusion; the second serves as a definitive conclusion.
 - D. The first anticipates the argument's conclusion; the second supports the conclusion.
 - E. The first qualifies a fact; the second states a conclusion.
12. It can be inferred from the passage that the author would agree with which of the following statements?
 - A. The discovery of the drug cyclosporine made it much harder for people who needed organs to get them.
 - B. Scientists should continue to experiment trying to develop organs in order to solve the problem of the organ donor shortage.
 - C. The technique of growing organs from patients' own cells is so potentially divisive that it should be discontinued.
13. If the information in this passage is true, which of the following must also be true?
 - A. Some people who need organ transplants today will not receive them in time.
 - B. Artificial organs will never be a viable option for people needing organ transplants.
 - C. Because of use of the drug cyclosporine, the human body no longer rejects foreign organs.
 - D. Creating organs from patients' own cells will become much easier over time.
 - E. In the future, people will no longer need organ transplants from donor organs.

practice test 4

Questions 14 and 15 are based on the following passage.

In January 2014, the *CLA World Factbook* listed Nicaragua as Central America's poorest economy and as the Western Hemisphere's second poorest economy. Employment figures alone suggest the nation's economic story: services account for 53% of jobs and agriculture *Line* for 28%; the Factbook lists no professional categories of employment. Indeed, the country is primarily known for agricultural products that include coffee, shrimp, tobacco, and sugar, all of which are important exports, along with textiles, which generate most of the remaining jobs in industry. Despite the fact that Nicaragua's economy has recently been growing at a 4% annual rate, debt burdens significantly impair progress. Additionally, the Heritage Foundation notes that Nicaragua's grim economic picture is exacerbated by political factors, including weak rule of law, which discourages both domestic and foreign investment, and anti-free market policies. These include costly regulatory procedures, which have historically led investors down a path of bribery or other corruption, and the prohibitively high cost of long-term financing, which discourages entrepreneurial initiative.

14. “Exacerbated” (line 9) most nearly means
- A. complicated.
 - B. instigated.
 - C. fermented.
 - D. implicated.
 - E. ameliorated.
15. The passage provides information on each of the following EXCEPT:
- A. The distribution of employment type in Nicaragua
 - B. The checks on investment in new enterprise in Nicaragua
 - C. Nicaragua's ranking among neighboring economies
 - D. Nicaragua's ranking among world economies
 - E. The negative effects of the weak rule of law in Nicaragua

For Questions 16–19, choose the two answers that best fit the meaning of the sentence as a whole and result in two completed sentences that are alike in meaning.

16. The motorist found the _____ of the police officer highly intimidating after being pulled over for speeding.
- A. brusqueness
 - B. amiability
 - C. asperity
 - D. complaisance
 - E. dourness
 - F. slovenliness

17. Many doctors are still _____ digitizing their patients' records. They see the process as expensive and time-consuming and are not convinced of its value.
- A. wary of
 - B. scrupulous about
 - C. meticulous about
 - D. skeptical about
 - E. dubious about
 - F. critical about
18. While the film had its charms, the critical praise it received was pretty _____.
- A. lavish
 - B. hyperbolic
 - C. immaterial
 - D. inflammatory
 - E. understated
 - F. overwrought
19. The critic applauded the novel for its wit but decried the one-dimensional nature of its characters. Upon reading the review, the novelist railed against the _____ of critics who can't tell that these characters are supposed to be one-dimensional.
- A. perfidy
 - B. obtuseness
 - C. treachery
 - D. naïveté
 - E. denseness
 - F. inexorableness

practice test 4

Question 20 is based on the following passage.

Although there are many serious consequences resulting from the destruction of tropical rainforests, perhaps the most significant is that of climate change. Tropical rainforests can absorb about 20 percent of the world's carbon dioxide emissions from the atmosphere, but *Line* as rainforests are cut down, less carbon dioxide is absorbed. In addition, by slashing and ⁵ burning the rainforests, human activities are adding huge amounts of carbon dioxide to the atmosphere, even more than is emitted by factories, planes, and automobiles all over the world. Ultimately, as deforestation continues, the amount of carbon dioxide and other greenhouse gas levels in the atmosphere will rise. This will, in turn, lead to an increase in temperature, eventually resulting in a change in weather patterns and sea levels.

For Question 20, consider each answer individually and select all choices that apply.

20. The author suggests which of the following will happen in the future if deforestation continues?
- A. There will be no tropical rainforests left in the world.
 - B. The earth's temperature will rise each year.
 - C. Less carbon dioxide will be absorbed from the atmosphere.

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.**

SECTION 4: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

The test-maker provides the following information that applies to all questions in the Quantitative Reasoning section of the GRE® General Test:

- All numbers used are real numbers.
- All figures are assumed to lie in a plane unless otherwise indicated.
- Geometric figures, such as lines, circles, triangles, and quadrilaterals, *are not necessarily* drawn to scale. That is, you should *not* assume that quantities such as lengths and angle measures are as they appear in a figure. You should assume, however, that lines shown as straight are actually straight, points on a line are in the order shown, and more generally, all geometric objects are in the relative positions shown. For questions with geometric figures, you should base your answers on geometric reasoning, not on estimating or comparing quantities by sight or by measurement.
- Coordinate systems, such as xy -planes and number lines, *are* drawn to scale. Therefore, you can read, estimate, or compare quantities in such figures by sight or by measurement.
- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–8, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1. Quantity A Quantity B
(0.03)(0.001)(0.6) (1.80)(0.0001)
- 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.

practice test 4

2. $a \neq 0$

a is the reciprocal of B .

Quantity A
 B

Quantity B
 a

- 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.

3. Quantity A
 $(\sqrt[3]{86})^2$

Quantity B
9

- 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.

4. Amelia invests \$1,000 at a simple annual interest rate of 3%.
Margot invests \$1,200 at a simple annual interest rate of 2%.

Quantity A

Amelia's investment after 16 years.

Quantity B

Margot's investment after 12 years.

- 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.

5. Mary is twice as old as Jay was 5 years ago. Jay is twice as old as Sue.
Altogether they are 15 years older than Mary is now.

Quantity A

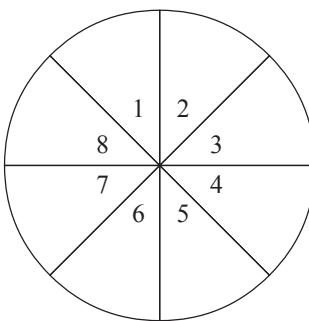
Mary

Quantity B

Jay

- 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.

6.

Quantity A

$$m\angle 1 + m\angle 2 + m\angle 3 + m\angle 4$$

Quantity B

$$m\angle 3 + m\angle 4 + m\angle 5 + m\angle 6$$

- 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.

7.

Quantity A

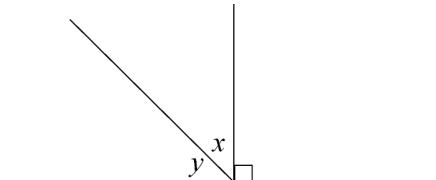
The complement of an angle A with a measure of 21 degrees.

Quantity B

The supplement of an angle B with a measure of 111 degrees.

- 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.

8.

Quantity A

The mean of x and y

Quantity B

60

- 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.

practice test 4

Questions 9–20 have several formats. Unless the directions state otherwise, choose one answer choice. For the Numeric Entry questions, follow the instructions below.

Numeric Entry Questions

The following items are the same for both the computer-based version and the paper-based version of the test. However, those taking the computer-based version will have additional information about entering answers in decimal and fraction boxes on the computer screen. Those taking the paper-based version will have information about entering answers on answer grids.

- Your answer may be an integer, a decimal, or a fraction, and it may be negative.
- If a question asks for a fraction, there will be two boxes. One box will be for the numerator and one will be for the denominator.
- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

9. What is the circumference of a circle that has area $\frac{81}{4}\pi$ square yards?
- A. $\frac{9}{4}\pi$ yards
B. $\frac{81}{4}\pi$ yards
C. $\frac{9}{2}\pi$ yards
D. 9π yards
E. $\frac{81}{2}\pi$ yards
10. A bag of cement weighs 94 pounds, and a bag of lime weighs 50 pounds. How many pounds does a shipment of 18 bags of cement and 5 bags of lime weigh?
- A. 250
B. 1,370
C. 1,442
D. 1,692
E. 1,942
11. Given $4f + 4g = 14$ and $15h + 15i = 60$, what is the mean of f, g, h , and i ?
- A. $1\frac{7}{8}$
B. $2\frac{1}{4}$
C. $8\frac{3}{5}$
D. $12\frac{3}{4}$
E. $18\frac{1}{2}$

12. Two fair six-sided dice (one blue and one yellow) with faces numbered 1, 2, 3, 4, 5, and 6 are rolled. What is the probability that both dice come to a stop on the same number?
- A. $\frac{1}{6}$
B. $\frac{1}{4}$
C. $\frac{1}{12}$
D. $\frac{1}{36}$
E. 6
13. A right triangle has a base of 12 and a hypotenuse of 13. What is the height of the remaining leg?
- A. 4
B. 5
C. 15
D. 20
E. 25
14. To manufacture soft pretzels, there is a built-in cost of \$320 to start the machines and an additional cost for materials of \$0.05 per pretzel. If the pretzels sell for 4 for \$1.00, how many have to be sold to break even for the day?
- A. 100
B. 160
C. 320
D. 1,600
E. 3,200

practice test 4

Questions 15–17 refer to the table below.

**Tahoe and Suburban Sales
1999–2013**

	Tahoe	Suburban
1999	72,000	70,000
2000	127,000	92,000
2001	127,000	101,000
2002	131,000	110,000
2003	126,000	137,000
2004	150,000	132,000
2005	201,000	152,000
2006	209,000	150,000
2007	197,000	132,000
2008	188,000	118,000
2009	151,000	88,000
2010	160,000	76,000
2011	148,000	83,000
2012	90,000	52,000
2013	71,000	42,000

15. What is the range of vehicles sold between 1999 and 2013?
- A. 42,000
 - B. 194,000
 - C. 167,000
 - D. 280,000
 - E. 290,000
16. If the average price of a Tahoe in 2010 was \$35,600 and the average price of a Suburban in 2010 was \$57,700, what was the total sales number in dollars for both vehicles that year?
- A. 1.00812×10^{10}
 - B. 1.65712×10^{10}
 - C. 2.65712×10^{10}
 - D. 2.98112×10^{10}
 - E. 3.12912×10^{10}

For Question 17, choose all that apply.

17. What are the mode and the median of the number of Tahoes sold between 1999 and 2013?
- A. 71,000
 - B. 127,000
 - C. 131,000
 - D. 148,000
 - E. 151,000
 - F. 180,000

practice test 4

18. Fernanda has 8 books in her reading list, from which she will choose 3 to take with her on vacation. How many different groups of 3 books from these 8 can she make?
- A. 24
B. 56
C. 120
D. 336
E. 6,720

For Questions 19 and 20, enter your answers in the boxes.

19. A salesperson earns a 15% commission on all sales before tax. If she earns \$26,700 in one year, how much merchandise did she sell? Round to the nearest cent.

\$

20. The frequency table shown represents the ages of all the goalkeepers in a soccer league. What is the median age of the league's goalkeepers?

Goalkeeper's Age	Frequency
23	1
25	3
26	2
27	3
29	1
31	3
32	2
34	2
37	1

STOP!
IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.

SECTION 5: QUANTITATIVE REASONING

35 minutes • 20 questions

(The paper-based version will have 25 questions to be completed in 40 minutes.)

For each question, follow the specific directions and choose the best answer.

The test-maker provides the following information that applies to all questions in the Quantitative Reasoning section of the GRE® General Test:

- All numbers used are real numbers.
- All figures are assumed to lie in a plane unless otherwise indicated.
- Geometric figures, such as lines, circles, triangles, and quadrilaterals, *are not necessarily* drawn to scale. That is, you should *not* assume that quantities such as lengths and angle measures are as they appear in a figure. You should assume, however, that lines shown as straight are actually straight, points on a line are in the order shown, and more generally, all geometric objects are in the relative positions shown. For questions with geometric figures, you should base your answers on geometric reasoning, not on estimating or comparing quantities by sight or by measurement.
- Coordinate systems, such as xy -planes and number lines, *are* drawn to scale. Therefore, you can read, estimate, or compare quantities in such figures by sight or by measurement.
- Graphical data presentations, such as bar graphs, circle graphs, and line graphs, *are* drawn to scale. Therefore, you can read, estimate, or compare data values by sight or by measurement.

For Questions 1–9, compare Quantity A and Quantity B. Some questions will have additional information above the two quantities to use in determining your answer.

1.

x and y are integers.

$$x > 0$$

$$y < 0$$

Quantity A

$$x^y$$

Quantity B

$$1$$

- 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.

practice test 4

2.

Quantity A

$$\frac{1}{3} \text{ of } 12$$

Quantity B

$$\frac{1}{4} \text{ of } 16$$

- 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.

3.

Quantity A

$$\frac{1}{\frac{1}{2} - \frac{1}{3}}$$

Quantity B

$$6^2 \cdot \left(\frac{1}{2} - \frac{1}{3}\right)$$

- 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.

4.

$$x^7 = -128$$

Quantity A

$$x^5$$

Quantity B

$$8x^2$$

- 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.

5.

$$\frac{5}{16}m = \frac{1}{8}$$

Quantity A

$$m$$

Quantity B

$$\frac{2}{5}$$

- 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.

6. Triangle ABC lies on the xy -plane with A at $(0, 0)$, B at $(4, 0)$, and C at (x, y) .

$$x, y > 0$$

$$\text{Area} = 24$$

Quantity A

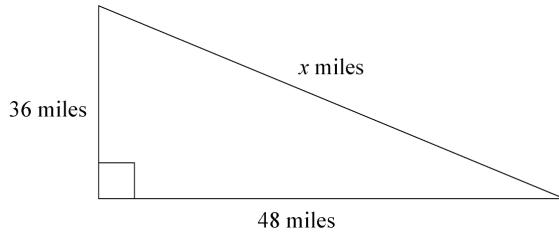
$$x$$

Quantity B

$$6$$

- 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.

7.



Quantity A

$$x$$

Quantity B

$$72$$

- 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.

8.

$$x + y = 16$$

Quantity A

Maximum value of xy

Quantity B

$$63$$

- 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.

9.

$$8x = 3.2$$

$$y = 4x - 1$$

Quantity A x Quantity B y

- 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.

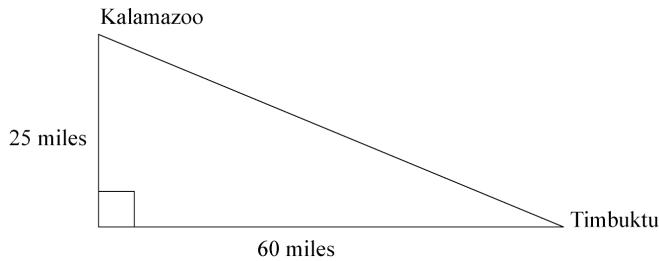
Questions 10–20 have several formats. Unless the directions state otherwise, choose one answer choice. For the Numeric Entry questions, follow the instructions below.

Numeric Entry Questions

The following items are the same for both the computer-based version and the paper-based version of the test. However, those taking the computer-based version will have additional information about entering answers in decimal and fraction boxes on the computer screen. Those taking the paper-based version will have information about entering answers on answer grids.

- Your answer may be an integer, a decimal, or a fraction, and it may be negative.
- If a question asks for a fraction, there will be two boxes. One box will be for the numerator and one will be for the denominator.
- Equivalent forms of the correct answer, such as 2.5 and 2.50, are all correct.
- Enter the exact answer unless the question asks you to round your answers.

10. How many miles is it from Kalamazoo to Timbuktu?



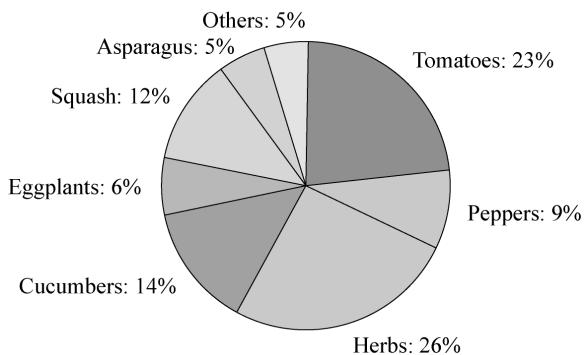
- A. 63
B. 64
C. 65
D. 66
E. 68

practice test 4

11. The local football booster club sells food at all home games. To make the accounting equal, they sell all products for the same price of \$1. If over the course of the season they sold 4 times as many hot dogs as candy bars, and half as many drinks as hot dogs, and they sold a total of \$1,400 worth of food, how many drinks did they sell?
- A. 200
 B. 400
 C. 600
 D. 800
 E. 1,400
12. Solve for x : $x^{-\frac{2}{3}} = 4$
- A. $\frac{1}{4}$
 B. 8
 C. -6
 D. $-\frac{8}{3}$
 E. $\frac{1}{8}$

Questions 13–15 refer to the graph below.

Vegetable Plant Sales in May



13. If in May the sales of tomato plants were \$13,482, what were the sales of all the vegetable plants?
- A. \$58,617.39
 B. \$59,871.09
 C. \$60,740.87
 D. \$62,137.83
 E. \$63,820.31

practice test 4

14. Total vegetation sales in May were \$124,717.85. What were the total sales of cucumbers and herbs combined?
- A. \$34,675.93
B. \$37,897.02
C. \$40,320.04
D. \$42,739.84
E. \$49,887.14
15. What is the ratio of squash sales to eggplant sales?
- A. $\frac{2}{9}$
B. $\frac{2}{1}$
C. $\frac{5}{4}$
D. $\frac{4}{7}$
E. $\frac{6}{11}$

For Questions 16 and 17, choose all that apply.

16. Find the next three numbers in the sequence: 1, -4, 16, -64, ...
- A. -4,096
B. -1,024
C. -256
D. 256
E. 1,024
F. 4,096
17. For which of the following defined operations does $a \Delta b$ always equal $b \Delta a$, where a and b are integers?
- A. $a \Delta b = |b - a|$
B. $a \Delta b = a^2 - b^2$
C. $a \Delta b = (a - b)^3$
D. $a \Delta b = a^b$
E. $a \Delta b = \left(\frac{1}{a} + \frac{1}{b}\right)^3$

For Questions 18 and 19, enter your answers in the boxes.

18. Jeff is 3 times as old as Billy, who is 2 times as old as Joe. In 7 years, their combined age will be 3 times Jeff's age now, plus 3. How old is Billy now?

19. If $(x - y)^2 \times (x + y)^2 = 9$ and $x^2 = 7$, what is y^2 ?

20. A pizzeria chef can produce 8 perfect pizza crusts every 5 minutes. How long does it take him to make 150 perfect pizza crusts?

STOP!

**IF YOU FINISH BEFORE THE TIME IS UP,
YOU MAY CHECK YOUR WORK IN THIS SECTION ONLY.**