

**SECTION 4****Time — 25 minutes****24 Questions****Turn to Section 4 (page 5) of your answer sheet to answer the questions in this section.****Directions:** For each question in this section, select the best answer from among the choices given and fill in the corresponding circle on the answer sheet.

Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

**Example:**

Hoping to ----- the dispute, negotiators proposed a compromise that they felt would be ----- to both labor and management.

- (A) enforce . . useful  
(B) end . . divisive  
(C) overcome . . unattractive  
(D) extend . . satisfactory  
(E) resolve . . acceptable

(A) (B) (C) (D) ☒

1. Some fans feel that sports events are ----- only when the competitors are of equal ability, making the outcome of the game -----.
- (A) successful . . assured  
(B) boring . . questionable  
(C) dull . . foreseen  
(D) interesting . . predictable  
(E) exciting . . uncertain
2. Alfred Schnittke's musical compositions are -----: phrases are clipped, broken into sections, and split apart by long rests.
- (A) garnished (B) improvisational  
(C) fragmented (D) cautious (E) uniform
3. The consumer advocate claimed that while drug manufacturers ----- the supposed advantages of their proprietary brands, generic versions of the same medications are often equally -----.
- (A) tout . . efficacious  
(B) research . . innocuous  
(C) market . . prohibitive  
(D) laud . . counterproductive  
(E) extract . . prescriptive
4. Latoya's ----- is shown by her ability to be -----: she can see her own faults more clearly than anyone else can.
- (A) perceptiveness . . self-centered  
(B) objectivity . . restrictive  
(C) cynicism . . self-destructive  
(D) open-mindedness . . complacent  
(E) insightfulness . . self-critical
5. The bearded dragon lizard is a voracious eater, so ----- that it will consume as many insects as possible.
- (A) abstemious (B) cannibalistic (C) slovenly  
(D) insatiable (E) unpalatable
6. Because drummer Tony Williams paved the way for later jazz-fusion musicians, he is considered a ----- of that style.
- (A) connoisseur (B) revivalist (C) beneficiary  
(D) disparager (E) progenitor
7. The politician's speech to the crowd was composed of nothing but -----, a bitter railing against the party's opponents.
- (A) digressions (B) diatribes (C) platitudes  
(D) machinations (E) acclamations
8. Favoring economy of expression in writing, the professor urged students toward a ----- rather than an ----- prose style.
- (A) spare . . ornate  
(B) terse . . opinionated  
(C) personal . . academic  
(D) baroque . . embellished  
(E) repetitive . . intricate

**GO ON TO THE NEXT PAGE** 



The passages below are followed by questions based on their content; questions following a pair of related passages may also be based on the relationship between the paired passages. Answer the questions on the basis of what is stated or implied in the passages and in any introductory material that may be provided.

Questions 9-12 are based on the following passages.

Passage 1

Line Food has always been considered one of the most salient  
5 markers of cultural traditions. When I was a small child,  
food was the only thing that helped identify my family as  
Filipino American. We ate *pansit lug-lug* (a noodle dish)  
and my father put *patis* (salty fish sauce) on everything.  
However, even this connection lessened as I grew older.  
As my parents became more acculturated, we ate less  
typically Filipino food. When I was twelve, my mother  
took cooking classes and learned to make French and  
10 Italian dishes. When I was in high school, we ate chicken  
marsala and shrimp fra diablo more often than Filipino  
dishes like *pansit lug-lug*.

Passage 2

Jean Anthelme Brillat-Savarin—who in 1825 confi-  
dently announced, “Tell me what you eat, and I will tell  
15 you who you are”—would have no trouble describing  
cultural identities of the United States. Our food reveals  
us as tolerant adventurers who do not feel constrained  
by tradition. We “play with our food” far more readily  
than we preserve the culinary rules of our varied ancestors.  
20 Americans have no single national cuisine. What unites  
American eaters culturally is how we eat, not what we  
eat. As eaters, Americans mingle the culinary traditions  
of many regions and cultures. We are multiethnic eaters.

9. Which of the following statements best captures the relationship between the two passages?

- (A) Passage 1 notes problems for which Passage 2 proposes solutions.
- (B) Passage 1 presents claims that are debunked by Passage 2.
- (C) Passage 2 furnishes a larger context for the experiences described in Passage 1.
- (D) Passage 2 provides an update of the situation depicted in Passage 1.
- (E) Passage 2 uses material presented in Passage 1 to correct a popular misconception.

10. The author of Passage 2 would most likely regard the mother’s willingness to “make French and Italian dishes” (lines 9-10, Passage 1) as

- (A) laughably pretentious
- (B) understandably conservative
- (C) typically American
- (D) a regrettable compromise
- (E) a surprising attitude

11. The two passages differ in their discussions of food primarily in that Passage 1

- (A) considers specific dishes eaten by particular people, whereas Passage 2 comments on a culture’s general attitude toward eating
- (B) contrasts the cuisines of different cultures, whereas Passage 2 emphasizes culinary practices common to all cultures
- (C) presents an abstract theory of food, whereas Passage 2 offers a historical analysis of consumption
- (D) emphasizes the role of nostalgia in food preferences, whereas Passage 2 rejects that approach as overly sentimental
- (E) outlines some popular choices in cuisine, whereas Passage 2 underscores those that are more unusual

12. Unlike the author of Passage 2, the author of Passage 1 makes significant use of

- (A) direct quotation
- (B) sociological analysis
- (C) hypothetical assumptions
- (D) historical sources
- (E) personal experience

Questions 13-24 are based on the following passages.

*The passages below discuss the possibility of locating intelligent life on other planets. Passage 1 has been adapted from a 1999 book on the history of the universe. Passage 2 was excerpted from a 2000 book on the scientific quest for extraterrestrial life.*

### Passage 1

Line  
5 Generations of science-fiction movies have conditioned us to consider bug-eyed monsters, large-brained intellectual humanoids, and other rather sophisticated extraterrestrial creatures as typical examples of life outside Earth. The reality, however, is that finding any kind of life at all, even something as simple as bacteria, would be one of the most exciting discoveries ever made.

10 The consensus within the scientific community seems to be that we eventually will find not only life in other parts of the galaxy but also intelligent and technologically advanced life. I have to say that I disagree. While I believe we will find other forms of life in other solar systems (if not in our own), I also feel it is extremely unlikely that a large number of advanced technological civilizations are out there, waiting to be discovered. The most succinct support for my view comes from Nobel laureate physicist Enrico Fermi, the man who ran the first nuclear reaction ever controlled by human beings. Confronted at a 1950 luncheon with scientific arguments for the ubiquity of technologically advanced civilizations, he supposedly said, "So where is everybody?"

15 This so-called Fermi Paradox embodies a simple logic. Human beings have had modern science only a few hundred years, and already we have moved into space. It is not hard to imagine that in a few hundred more years we will be a starfaring people, colonizing other systems. Fermi's argument maintains that it is extremely unlikely that many other civilizations discovered science at exactly the same time we did. Had they acquired science even a thousand years earlier than we, they now could be so much more advanced that they would already be colonizing our solar system.

20 If, on the other hand, they are a thousand years behind us, we will likely arrive at their home planet before they even begin sending us radio signals. Technological advances build upon each other, increasing technological abilities faster than most people anticipate. Imagine, for example, how astounded even a great seventeenth-century scientist like Isaac Newton would be by our current global communication system, were he alive today. Where are those highly developed extraterrestrial civilizations so dear to the hearts of science-fiction writers? Their existence is far from a foregone conclusion.

### Passage 2

45 Although posed in the most casual of circumstances, the Fermi Paradox has reverberated through the decades and has at times threatened to destroy the credibility of those scientists seriously engaged in the Search for Extraterrestrial Intelligence (SETI) research program.

50 One possible answer to Fermi's question ("If there are extraterrestrials, where are they?") is that extraterrestrials have in fact often visited Earth, and continue to do so. This is the answer of those who believe in the existence of unidentified flying objects, or UFO's. But few scientists, even those engaged in SETI, take the UFO claims seriously. "You won't find anyone around here who believes in UFO's," says Frank Drake, a well-known SETI scientist. If one discounts the UFO claims, yet still believes that there are many technological civilizations in the galaxy, why have they not visited us? Drake's answer is straightforward: "High-speed interstellar travel is so demanding of resources and so hazardous that intelligent civilizations don't attempt it." And why should they attempt it, when radio communication can supply all the information they might want?

55 At first glance, Drake's argument seems very persuasive. The distances between stars are truly immense. To get from Earth to the nearest star and back, traveling at 99 percent of the speed of light, would take 8 years. And SETI researchers have shown that, to accelerate a spacecraft to such a speed, to bring it to a stop, and to repeat the process in the reverse direction, would take almost unimaginable amounts of energy.

60 Astronomer Ben Zuckerman challenges Drake's notion that technological beings would be satisfied with radio communication. "Drake's implicit assumption is that the only thing we're going to care about is intelligent life. But what if we have an interest in simpler life-forms? If you turn the picture around and you have some advanced extraterrestrials looking at the Earth, until the last hundred years there was no evidence of intelligent life but for billions of years before that they could have deduced that this was a very unusual world and that there were probably living creatures on it. They would have had billions of years to come investigate." Zuckerman contends that the reason extraterrestrials haven't visited us is that so few exist.

- 13.** Which statement about the Fermi Paradox is supported by both passages?
- (A) It articulates a crucial question for those interested in the existence of extraterrestrials.
  - (B) It clarifies the astronomical conditions required to sustain life on other planets.
  - (C) It reveals the limitations of traditional ideas about the pace of technological change.
  - (D) It demonstrates the scientific community's fascination with the concept of interstellar travel.
  - (E) It suggests that advanced extraterrestrial civilizations may be uninterested in our culture.
- 14.** Which statement best describes a significant difference between the two passages?
- (A) Passage 1 analyzes a literary form, while Passage 2 argues that literature has little bearing on science.
  - (B) Passage 1 presents an argument, while Passage 2 surveys current opinion in a debate.
  - (C) Passage 1 concludes by rejecting the Fermi Paradox, while Passage 2 opens by embracing it.
  - (D) Passage 1 describes a phenomenon, while Passage 2 details a belief system that would reject such a phenomenon.
  - (E) Passage 1 defends a viewpoint, while Passage 2 questions that viewpoint's place in scientific research.
- 15.** The author of Passage 1 mentions "monsters," "humanoids," and "creatures" (lines 2-4) primarily to
- (A) question the literary value of science fiction
  - (B) contrast fictional notions with a scientific perspective
  - (C) offer examples of the human fear of the unknown
  - (D) criticize science fiction for being unduly alarmist
  - (E) suggest that scientific research has been influenced by science fiction
- 16.** In line 17, "ran" most nearly means
- (A) fled
  - (B) accumulated
  - (C) traversed
  - (D) managed
  - (E) incurred
- 17.** Passage 1 suggests that the Fermi Paradox depends most directly on which assumption?
- (A) Extraterrestrial civilizations may not wish to be discovered by human beings.
  - (B) Extraterrestrial civilizations would most likely have discovered technology at about the same time human beings discovered it.
  - (C) Extraterrestrial technology would develop at roughly the same rate as human technology.
  - (D) Extraterrestrial civilizations would inevitably use technology for aggressive ends.
  - (E) Science is a more powerful form of human knowledge than are art and literature.
- 18.** The claim made in Passage 1 that a "consensus" exists (lines 8-11) would most likely be interpreted by the author of Passage 2 as
- (A) evidence of compromise in the scientific community
  - (B) an attack on SETI researchers
  - (C) support for Fermi's analysis
  - (D) a revelation of an unexpected truth
  - (E) an oversimplification of a complex debate
- 19.** The author of Passage 1 mentions Isaac Newton (lines 37-40) in order to
- (A) emphasize the rapid rate of technological innovation
  - (B) acknowledge the impact of a profound thinker
  - (C) criticize the inflexibility of Newton's contemporaries
  - (D) speculate about Newton's influence on current research
  - (E) highlight the value of scientific curiosity
- 20.** In lines 44-48, the author of Passage 2 indicates that the Fermi Paradox has been
- (A) thoroughly misunderstood
  - (B) surprisingly influential
  - (C) overwhelmingly perplexing
  - (D) intermittently popular
  - (E) frequently misquoted



21. How would Frank Drake (line 56, Passage 2) most likely respond to the statement by the author of Passage 1 about humans “colonizing other systems” (line 26) ?
- (A) The means to accomplish such a project may be beyond our reach.
  - (B) Interstellar colonization is as morally problematic as was colonization on Earth.
  - (C) We would do better to study indigenous life-forms rather than search for extraterrestrial creatures.
  - (D) Humans would be wise to consider that they themselves are subject to colonization.
  - (E) Funding for such an undertaking would pose a thorny political issue for any government.
22. In line 57, “claims” most nearly means
- (A) demands
  - (B) assertions
  - (C) rights
  - (D) territories
  - (E) compensations
23. In line 63, “radio communication” is cited as a
- (A) complex interaction
  - (B) technological relic
  - (C) common occurrence
  - (D) practical alternative
  - (E) dramatic advance
24. Both the author of Passage 1 and Ben Zuckerman (line 73, Passage 2) imply that researchers seeking life on another planet should focus on which of the following?
- (A) Seasonal variations in color due to plant life
  - (B) Evidence of the most basic forms of life
  - (C) Signs of artificially created structures
  - (D) Signals that might be radio communications
  - (E) Changes in geological surface features

**STOP**

**If you finish before time is called, you may check your work on this section only.  
Do not turn to any other section in the test.**

# Correct Answers and Difficulty Levels

## Critical Reading

Section 4			Section 7			Section 8		
COR. DIFF. ANS. LEV.			COR. DIFF. ANS. LEV.			COR. DIFF. ANS. LEV.		COR. DIFF. ANS. LEV.
1. E 1		13. A 3	1. D 1		13. C 3	1. B 1		11. C 3
2. C 1		14. B 4	2. D 1		14. E 3	2. D 2		12. B 3
3. A 4		15. B 3	3. A 2		15. C 3	3. E 3		13. B 3
4. E 2		16. D 1	4. C 5		16. C 3	4. D 3		14. A 2
5. D 4		17. C 3	5. B 5		17. D 2	5. E 5		15. E 3
6. E 4		18. E 5	6. E 3		18. D 2	6. D 5		16. D 2
7. B 5		19. A 3	7. B 1		19. E 4	7. A 3		17. C 4
8. A 5		20. B 4	8. C 4		20. E 5	8. C 3		18. C 3
9. C 3		21. A 4	9. A 5		21. A 4	9. D 3		19. E 3
10. C 2		22. B 2	10. B 3		22. D 3	10. D 3		
11. A 2		23. D 3	11. B 5		23. B 3			
12. E 1		24. B 3	12. A 3		24. E 3			

Number correct

Number correct

Number correct

Number incorrect

Number incorrect

Number incorrect

## Math

Section 2		Section 6			Section 9	
COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.	Multiple-Choice Questions COR. DIFF. ANS. LEV.	Student-Produced Response Questions COR. ANS.	DIFF. LEV.	COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.
1. D 1	11. E 3	1. A 1	9. 12	1	1. A 1	9. C 3
2. B 1	12. E 2	2. C 1	10. 2	2	2. B 1	10. A 3
3. D 1	13. E 3	3. B 2	11. $120 < x < 125$	2	3. D 1	11. D 3
4. C 1	14. A 4	4. B 2	12. 2035	3	4. C 1	12. E 4
5. B 2	15. A 4	5. A 3	13. 5	3	5. C 3	13. B 4
6. A 2	16. B 4	6. E 5	14. 89	3	6. A 2	14. C 4
7. A 2	17. B 5	7. E 4	15. $13/2$ or 6.5	4	7. D 3	15. C 5
8. C 3	18. D 4	8. A 4	16. $5/9$ , .555 or .556	4	8. E 3	16. E 5
9. C 3	19. C 5		17. 700	5		
10. D 2	20. D 5		18. 120	4		

Number correct

Number correct

Number correct  
(9-18)

Number correct

Number incorrect

Number incorrect

Number incorrect

## Writing

Section 5				Section 10		
COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.	COR. DIFF. ANS. LEV.
1. D 1	10. E 3	19. E 3	28. C 5	1. C 1	6. B 2	11. A 3
2. C 1	11. C 3	20. A 3	29. B 5	2. C 1	7. E 1	12. C 4
3. A 1	12. B 1	21. C 3	30. B 3	3. A 1	8. D 3	13. E 5
4. E 1	13. E 3	22. B 3	31. E 3	4. C 2	9. A 3	14. E 5
5. C 1	14. C 2	23. B 3	32. D 3	5. B 1	10. D 3	
6. B 1	15. C 2	24. A 3	33. A 3			
7. E 2	16. E 3	25. C 4	34. C 4			
8. C 2	17. C 3	26. B 3	35. E 3			
9. A 2	18. B 3	27. B 4				

Number correct

Number correct

Number incorrect

Number incorrect

**NOTE:** Difficulty levels are estimates of question difficulty for a reference group of college-bound seniors. Difficulty levels range from 1 (easiest) to 5 (hardest).

## SAT Score Conversion Table

Raw Score	Critical Reading Scaled Score	Math Scaled Score	Writing Multiple-Choice Scaled Score*	Raw Score	Critical Reading Scaled Score	Math Scaled Score	Writing Multiple-Choice Scaled Score*
67	800			31	510	560	54
66	800			30	500	550	54
65	800			29	500	540	53
64	780			28	490	530	52
63	760			27	480	530	51
62	750			26	480	520	50
61	730			25	470	510	49
60	720			24	460	500	48
59	710			23	460	490	47
58	700			22	450	480	47
57	690			21	450	470	46
56	680			20	440	460	45
55	670			19	430	450	44
54	660	800		18	430	440	43
53	650	800		17	420	430	42
52	640	780		16	410	420	41
51	640	760		15	410	420	41
50	630	740		14	400	410	40
49	620	730	80	13	390	400	39
48	610	720	78	12	380	390	38
47	610	710	75	11	380	380	37
46	600	700	73	10	370	370	36
45	590	690	71	9	360	360	35
44	590	680	69	8	350	350	34
43	580	670	67	7	340	330	33
42	580	660	66	6	330	320	32
41	570	650	65	5	320	310	31
40	560	640	64	4	310	290	30
39	560	630	62	3	300	280	28
38	550	620	61	2	280	260	27
37	540	620	60	1	270	240	25
36	540	610	59	0	250	210	24
35	530	600	58	-1	230	200	22
34	530	590	57	-2	210	200	20
33	520	580	56	-3	200	200	20
32	510	570	55	and below			

This table is for use only with the test in this booklet.

\*The writing multiple-choice score is reported on a 20-80 scale. Use the table on the following page for the writing composite scaled score.