



# The Ivy LEAGUE EDUCATION CENTER

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## Official SAT Practice Test

### Taking the Practice Test

The practice test will help you most if you take it under conditions as close as possible to those of the actual test. The test packet was extracted from College Board's REAL SAT sets. Form Codes: May 2014/AEKC, BWKC, CFKC. It includes an extra 25-minute critical reading multiple-choice section that doesn't count toward your score. The test is exactly the same as the real test that provided by College Board/ETS. The score is pretty accurate and meaningful.

- **Set aside 4 hours of uninterrupted time**

That way you can complete the entire test in one sitting. *Note:* The total testing/break time is 4 hours, including three 5-minute breaks and three hours and 45 minutes of testing time (10 sections total).

**Schedule:**

Section 1:	Essay	25 minutes
Section 2:	Critical Reading	25 minutes
<i>Break</i>		<i>5 minutes</i>
Section 3:	Critical Reading	25 minutes
Section 4:	Math	25 minutes
<i>Break</i>		<i>5 minutes</i>
Section 5:	Critical Reading	25 minutes
Section 6:	Writing	25 minutes
<i>Break</i>		<i>5 minutes</i>
Section 7:	Math	25 minutes
Section 8:	Critical Reading	20 minutes
Section 9:	Math	20 minutes
Section 10:	Writing	10 minutes

- **Sit at a desk or table cleared of any other papers or books**  
You won't be able to take a dictionary, books, notes, or scratch paper into the test room.
- **Allow yourself the specified amount of time for each section**  
Pace yourself by using a watch (without an audible alarm), which is what you are allowed to use on test day
- **Have a calculator at hand when you take the math sections**  
This will help you determine how much to use a calculator the day of the test. Use a calculator with which you are familiar—preferably the same calculator you will use on test day.
- **Read the test instructions carefully**  
They are reprinted from the back cover of the test book. On test day, you will be asked to read them before you begin answering questions.
- **Make sure you use a No. 2 pencil**  
It is very important that you fill in the entire circle on the answer sheet darkly and completely. If you change your response, erase it as completely as possible. It is very important that you follow these instructions when filling out your answer sheet.
- **Record your answers on paper, then email to [ivymocktest@gmail.com](mailto:ivymocktest@gmail.com)**  
Use the answer sheet when completing a practice test on paper to simulate the real testing environment. After completing the practice test, you can ask your proctor to email to [ivymocktest@gmail.com](mailto:ivymocktest@gmail.com)



**SECTION**

**1**

- I understand that my essay (without my name) may be reproduced in other College Board materials. If I mark this circle, I withhold my permission to reproduce my essay for any purposes beyond score reporting and the assessment of my writing skills. Marking this circle will have no effect on my score, nor will it prevent my essay from being made available to any college to which I send my SAT scores.

**IMPORTANT: USE A NO. 2 PENCIL. DO NOT WRITE OUTSIDE THE BORDER!**

Words written outside the essay box or written in ink **WILL NOT APPEAR** in the copy sent to be scored, and your score will be affected.

**Begin your essay on this page. If you need more space, continue on the next page.**

Essay writing area with horizontal lines.



COMPLETE MARK ●

EXAMPLES OF INCOMPLETE MARKS



You must use a No. 2 pencil and marks must be complete. Do not use a mechanical pencil. It is very important that you fill in the entire circle darkly and completely. If you change your response, erase as completely as possible. Incomplete marks or erasures may affect your score.

SECTION 2

- 1 (A B C D E)
- 2 (A B C D E)
- 3 (A B C D E)
- 4 (A B C D E)
- 5 (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)

- 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 E)
- 17 (A B C D E)
- 18 (A B C D E)
- 19 (A B C D E)
- 20 (A B C D E)

- 21 (A B C D E)
- 22 (A B C D E)
- 23 (A B C D E)
- 24 (A B C D E)
- 25 (A B C D E)
- 26 (A B C D E)
- 27 (A B C D E)
- 28 (A B C D E)
- 29 (A B C D E)
- 30 (A B C D E)

- 31 (A B C D E)
- 32 (A B C D E)
- 33 (A B C D E)
- 34 (A B C D E)
- 35 (A B C D E)
- 36 (A B C D E)
- 37 (A B C D E)
- 38 (A B C D E)
- 39 (A B C D E)
- 40 (A B C D E)

SECTION 3

- 1 (A B C D E)
- 2 (A B C D E)
- 3 (A B C D E)
- 4 (A B C D E)
- 5 (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)

- 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 E)
- 17 (A B C D E)
- 18 (A B C D E)
- 19 (A B C D E)
- 20 (A B C D E)

- 21 (A B C D E)
- 22 (A B C D E)
- 23 (A B C D E)
- 24 (A B C D E)
- 25 (A B C D E)
- 26 (A B C D E)
- 27 (A B C D E)
- 28 (A B C D E)
- 29 (A B C D E)
- 30 (A B C D E)

- 31 (A B C D E)
- 32 (A B C D E)
- 33 (A B C D E)
- 34 (A B C D E)
- 35 (A B C D E)
- 36 (A B C D E)
- 37 (A B C D E)
- 38 (A B C D E)
- 39 (A B C D E)
- 40 (A B C D E)

CAUTION

Grid answers in the section below for SECTION 2 or SECTION 3 only if directed to do so in your test book.

Student-Produced Responses

ONLY ANSWERS THAT ARE GRIDDED WILL BE SCORED. YOU WILL NOT RECEIVE CREDIT FOR ANYTHING WRITTEN IN THE BOXES.

Quality Assurance Mark

SECT. 2 OR 3 ONLY

9

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

10

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

11

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

12

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

13

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

14

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

15

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

16

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

17

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

18

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

**COMPLETE MARK** ●

**EXAMPLES OF INCOMPLETE MARKS**



You must use a No. 2 pencil and marks must be complete. Do not use a mechanical pencil. It is very important that you fill in the entire circle darkly and completely. If you change your response, erase as completely as possible. Incomplete marks or erasures may affect your score.

**SECTION 4**

1	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	11	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	21	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	31	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
2	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	12	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	22	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	32	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
3	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	13	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	23	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	33	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
4	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	14	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	24	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	34	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
5	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	15	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	25	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	35	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
6	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	16	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	26	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	36	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
7	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	17	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	27	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	37	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
8	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	18	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	28	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	38	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
9	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	19	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	29	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	39	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
10	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	20	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	30	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	40	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E

**SECTION 5**

1	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	11	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	21	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	31	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
2	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	12	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	22	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	32	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
3	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	13	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	23	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	33	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
4	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	14	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	24	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	34	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
5	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	15	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	25	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	35	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
6	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	16	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	26	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	36	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
7	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	17	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	27	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	37	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
8	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	18	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	28	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	38	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
9	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	19	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	29	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	39	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
10	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	20	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	30	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E	40	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E

**CAUTION** Grid answers in the section below for SECTION 4 or SECTION 5 only if directed to do so in your test book.

**Student-Produced Responses** ONLY ANSWERS THAT ARE GRIDDED WILL BE SCORED. YOU WILL NOT RECEIVE CREDIT FOR ANYTHING WRITTEN IN THE BOXES.

Quality Assurance Mark

**SECT. 4 OR 5 ONLY**

9		10		11		12		13	
14		15		16		17		18	

COMPLETE MARK ●

EXAMPLES OF INCOMPLETE MARKS



You must use a No. 2 pencil and marks must be complete. Do not use a mechanical pencil. It is very important that you fill in the entire circle darkly and completely. If you change your response, erase as completely as possible. Incomplete marks or erasures may affect your score.

SECTION 6

- 1 (A B C D E)
2 (A B C D E)
3 (A B C D E)
4 (A B C D E)
5 (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)

- 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 E)
17 (A B C D E)
18 (A B C D E)
19 (A B C D E)
20 (A B C D E)

- 21 (A B C D E)
22 (A B C D E)
23 (A B C D E)
24 (A B C D E)
25 (A B C D E)
26 (A B C D E)
27 (A B C D E)
28 (A B C D E)
29 (A B C D E)
30 (A B C D E)

- 31 (A B C D E)
32 (A B C D E)
33 (A B C D E)
34 (A B C D E)
35 (A B C D E)
36 (A B C D E)
37 (A B C D E)
38 (A B C D E)
39 (A B C D E)
40 (A B C D E)

SECTION 7

- 1 (A B C D E)
2 (A B C D E)
3 (A B C D E)
4 (A B C D E)
5 (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)

- 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 E)
17 (A B C D E)
18 (A B C D E)
19 (A B C D E)
20 (A B C D E)

- 21 (A B C D E)
22 (A B C D E)
23 (A B C D E)
24 (A B C D E)
25 (A B C D E)
26 (A B C D E)
27 (A B C D E)
28 (A B C D E)
29 (A B C D E)
30 (A B C D E)

- 31 (A B C D E)
32 (A B C D E)
33 (A B C D E)
34 (A B C D E)
35 (A B C D E)
36 (A B C D E)
37 (A B C D E)
38 (A B C D E)
39 (A B C D E)
40 (A B C D E)

CAUTION

Grid answers in the section below for SECTION 6 or SECTION 7 only if directed to do so in your test book.

Student-Produced Responses

ONLY ANSWERS THAT ARE GRIDDED WILL BE SCORED. YOU WILL NOT RECEIVE CREDIT FOR ANYTHING WRITTEN IN THE BOXES.

SECT. 6 OR 7 ONLY

9. Grid with numbers 1-9 and a shaded area at the top.

10. Grid with numbers 1-9 and a shaded area at the top.

11. Grid with numbers 1-9 and a shaded area at the top.

12. Grid with numbers 1-9 and a shaded area at the top.

13. Grid with numbers 1-9 and a shaded area at the top.

14. Grid with numbers 1-9 and a shaded area at the top.

15. Grid with numbers 1-9 and a shaded area at the top.

16. Grid with numbers 1-9 and a shaded area at the top.

17. Grid with numbers 1-9 and a shaded area at the top.

18. Grid with numbers 1-9 and a shaded area at the top.

Quality Assurance Mark

PLEASE DO NOT WRITE IN THIS AREA



SERIAL #



COMPLETE MARK ●

EXAMPLES OF INCOMPLETE MARKS



You must use a No. 2 pencil and marks must be complete. Do not use a mechanical pencil. It is very important that you fill in the entire circle darkly and completely. If you change your response, erase as completely as possible. Incomplete marks or erasures may affect your score.

SECTION 8

- 1 A B C D E
- 2 A B C D E
- 3 A B C D E
- 4 A B C D E
- 5 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

- 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 E
- 17 A B C D E
- 18 A B C D E
- 19 A B C D E
- 20 A B C D E

- 21 A B C D E
- 22 A B C D E
- 23 A B C D E
- 24 A B C D E
- 25 A B C D E
- 26 A B C D E
- 27 A B C D E
- 28 A B C D E
- 29 A B C D E
- 30 A B C D E

- 31 A B C D E
- 32 A B C D E
- 33 A B C D E
- 34 A B C D E
- 35 A B C D E
- 36 A B C D E
- 37 A B C D E
- 38 A B C D E
- 39 A B C D E
- 40 A B C D E

SECTION 9

- 1 A B C D E
- 2 A B C D E
- 3 A B C D E
- 4 A B C D E
- 5 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

- 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 E
- 17 A B C D E
- 18 A B C D E
- 19 A B C D E
- 20 A B C D E

- 21 A B C D E
- 22 A B C D E
- 23 A B C D E
- 24 A B C D E
- 25 A B C D E
- 26 A B C D E
- 27 A B C D E
- 28 A B C D E
- 29 A B C D E
- 30 A B C D E

- 31 A B C D E
- 32 A B C D E
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Quality Assurance Mark

SECTION 10

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**CERTIFICATION STATEMENT**

I certify that I am the person whose name, address and signature appear on this answer sheet.

Signature \_\_\_\_\_

Date \_\_\_\_\_

PLEASE DO NOT WRITE IN THIS AREA



**SERIAL #**



**The Ivy**  
LEAGUE

# OFF-SITE PROCTOR EXAM FORM

## Education Center

It is imperative that a proctor (most likely a parent) be present during SAT mock testing to time the student. This is to ensure that the testing accurately measures the student's strengths and weaknesses on the SAT.

### PROCTOR INFORMATION

Proctor First Name: \_\_\_\_\_ Last: \_\_\_\_\_

Business Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Email: \_\_\_\_\_

I certify that the student has completed his/her testing according to the following official SAT testing time limits.

Section 1:	Essay	25 minutes
Section 2:	Critical Reading	25 minutes
Break		5 minutes
Section 3:	Critical Reading	25 minutes
Section 4:	Math	25 minutes
Break		5 minutes
Section 5:	Critical Reading	25 minutes
Section 6:	Writing	25 minutes
Break		5 minutes
Section 7:	Math	25 minutes
Section 8:	Critical Reading	20 minutes
Section 9:	Math	20 minutes
Section 10:	Writing	10 minutes

Proctor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please verify all information on the answer sheet has been properly completed.

**PLEASE EMAIL THE ANSWER SHEET ALONG WITH THIS FORM TO: [ivymocktest@gmail.com](mailto:ivymocktest@gmail.com)**

PLEASE DO NOT WRITE IN THIS AREA



**SERIAL #**

**Form Codes AEKC, BWKC, CFKC**



# The SAT<sup>®</sup>

## **Question-and-Answer Service**

### **May 2014 Administration**

#### **INSIDE:**

- Test questions and correct answers
- The difficulty level for each question
- Your essay prompt and all other essay prompts administered on your test day
- Instructions for scoring your test
- Suggestions for using this report

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SAT<sup>®</sup>

**ESSAY**  
**Time — 25 minutes**

The essay gives you an opportunity to show how effectively you can develop and express ideas. You should, therefore, take care to develop your point of view, present your ideas logically and clearly, and use language precisely.

Your essay must be written on the lines provided on your answer sheet—you will receive no other paper on which to write. You will have enough space if you write on every line, avoid wide margins, and keep your handwriting to a reasonable size. Remember that people who are not familiar with your handwriting will read what you write. Try to write or print so that what you are writing is legible to those readers.

**Important Reminders:**

- **A pencil is required for the essay.** An essay written in ink will receive a score of zero.
- **Do not write your essay in your test book.** You will receive credit only for what you write on your answer sheet.
- **An off-topic essay will receive a score of zero.**
- **If your essay does not reflect your original and individual work, your scores for the entire test may be canceled.**
- **An electronic copy of your essay will be made available to each of your designated score recipients: colleges, universities, and scholarship programs.**

You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

We place far too much emphasis on experience and achievement in our society. We tend to judge people based on what they've done rather than on what they can do. But looking only at someone's experience and achievements ignores how that person may develop or what that person may become. We can only determine people's true worth by what they are capable of doing, not by what they have already done.

**Assignment:** Should people be judged by their potential rather than by their experience and achievements? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

**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.**



## ESSAY

Time — 25 minutes

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You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

We all have authority figures we need to deal with on a regular basis—parents, teachers, bosses, coaches, and others. Usually, we follow their advice and do what they tell us to do because they have more experience and knowledge than we do. However, sometimes we disagree with someone who holds authority over us and need to stand up for ourselves, even if it means suffering negative consequences.

**Assignment:** Should we express our disagreement with authority figures even if there are negative consequences? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

**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.**

**ESSAY**  
Time — 25 minutes

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Your essay must be written on the lines provided on your answer sheet—you will receive no other paper on which to write. You will have enough space if you write on every line, avoid wide margins, and keep your handwriting to a reasonable size. Remember that people who are not familiar with your handwriting will read what you write. Try to write or print so that what you are writing is legible to those readers.

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You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

Many people believe that it is important to plan ahead and to work toward an accomplishment that may take years to achieve, even if doing so means giving up immediate pleasures and fun. To these people, the end result of such an achievement is worth making sacrifices for in the present. Others, though, believe that it is much more important to focus on enjoying the present because it is impossible to predict what will happen in the future and because life's joyful moments are so rare.

**Assignment:** Should people focus on enjoying the present moment instead of following a plan for future achievement? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

**If you finish before time is called, you may check your work on this section only.  
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### ESSAY

Time — 25 minutes

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#### Important Reminders:

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- An electronic copy of your essay will be made available to each of your designated score recipients: colleges, universities, and scholarship programs.

You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

Public opinion—the sum of the attitudes or beliefs held by a majority of the population—is primarily expressed through the media or public opinion polls. Leaders and politicians are often swayed by it, believing that public opinion is everything. Yet true leaders should not listen to what the public thinks; they should follow their own convictions, whether or not the majority of their fellow citizens agree with them.

**Assignment:** Should leaders follow their own convictions or submit to public opinion? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

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.





## SECTION 2

Time — 25 minutes

23 Questions

Turn to Section 2 (page 4) 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) ●

- The aroma of the freshly baked bread was so ----- that we were tempted to buy three loaves.  
(A) enticing (B) unruly (C) convenient  
(D) fabricated (E) generic
- Muddy Waters ----- a generation of musical -----: they imitated his innovative playing style and eventually solidified his reputation as a blues pioneer.  
(A) emulated . . followers  
(B) chastised . . contenders  
(C) resisted . . paragons  
(D) fostered . . critics  
(E) inspired . . disciples
- In these mountains, the ----- stature of plants testifies to the inhibiting influence of -----, often buffeting winds.  
(A) small . . constant  
(B) diminutive . . imperceptible  
(C) typical . . moderate  
(D) considerable . . intermittent  
(E) giant . . destructive
- Some of the guests were positively -----, speaking disrespectfully to their host and generally exhibiting deplorable manners.  
(A) bemused (B) cursory (C) forlorn  
(D) incoherent (E) uncouth
- The economist had a reputation as -----; his colleagues liked to tease him that he ----- recessions because he looked for trouble.  
(A) a maverick . . expected  
(B) an ogre . . disregarded  
(C) an alarmist . . foresaw  
(D) an indigent . . downplayed  
(E) a scholar . . enjoyed
- Initially ----- by some shortsighted members of the scientific community, Barbara McClintock was ultimately ----- when she received a Nobel Prize in 1983 for her groundbreaking research in genetics.  
(A) repudiated . . abjured  
(B) immortalized . . exonerated  
(C) rebuffed . . vindicated  
(D) derided . . ostracized  
(E) eulogized . . substantiated
- The city councilwoman was devoted to ----- principles, for she believed that all her constituents deserved equal rights and privileges.  
(A) sectarian (B) egalitarian (C) authoritarian  
(D) diplomatic (E) bureaucratic
- Both of the twins tended toward -----, and these attention-seeking emotional displays had won neither of them many friends.  
(A) punctiliousness (B) stridency  
(C) seditiousness (D) histrionics  
(E) sagacity



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**

The mistake most actors make is that they think about the result instead of the objectives that lead to the result. Actors playing sorrowful scenes, for example, may churn themselves up into an emotional frenzy, thereby hoping to  
 5 impress us. But, of course, the *character's* objective is not "to impress the audience." Instead, the character wants to accomplish something in the play—to seduce, to humiliate, to convince, to intimidate, to flee. By avoiding objectives and aiming straight at the result, you get a forced product  
 10 that can lead to nothing but ham acting.

**Passage 2**

If I was playing a tough guy, I was to remember that all tough guys walked tough, talked tough, breathed tough, smelled tough, *spit* tough. That forced me into caricatures  
 15 you wouldn't believe. To play a tough guy I would go around with my hands ready to strangle somebody, my mouth twisted; I would lower my voice and really be breathing fire, you know what I mean? Well, I looked ridiculous trying to play a tough guy. Not that I *couldn't*  
 20 play a tough guy—but I was under the impression that in order to be the tough guy, you had to create that tough guy out of external appearances.

9. Which best describes the relationship between the two passages?

- (A) Passage 2 identifies and challenges a bias shown in Passage 1.
- (B) Passage 2 casts doubt on evidence provided by Passage 1.
- (C) Passage 2 criticizes a set of behaviors advocated by Passage 1.
- (D) Passage 2 demonstrates a phenomenon discussed in Passage 1.
- (E) Passage 2 offers a solution to a problem posed in Passage 1.

10. Compared to the tone of Passage 1, the tone of Passage 2 is more

- (A) defiant
- (B) didactic
- (C) sarcastic
- (D) appreciative
- (E) conversational

11. The author of Passage 1 would most likely say that the author of Passage 2 should prepare for a role by

- (A) drawing on his own personal experiences
- (B) considering how to move the audience with his performance
- (C) trying to understand the underlying motivation of his character
- (D) studying how other actors have performed the role in the past
- (E) practicing the full range of emotions that the character feels

12. Both authors would most likely agree that the "tough guy" performance described in Passage 2 is

- (A) frightening
- (B) vulgar
- (C) inauthentic
- (D) insensitive to the audience
- (E) motivated by inner feeling



Questions 13-23 are based on the following passage.

The narrator of this fictional passage, set in the 1950s, describes how the inhabitants of her small Virginia town react to newcomer Carroll Byrd. Byrd has recently arrived from Maine and lives in her late father's house.

Line  
5 Mama was a great cook. She also loved to talk on the phone, and during the next weeks, I strained to overhear any mention of Carroll Byrd. I got plenty of material. But since Mama generally stayed home and was the recipient rather than the purveyor of news, it was sometimes hard for me to figure out what had actually happened.

"She what?"

"You're kidding! Why, those rugs are worth a fortune! That furniture came from England!"

10 "Oh, he did *not*!"

"Well, that is the strangest thing I have ever heard in my whole life. The strangest!"

"You're kidding!"

Et cetera.

15 I had to decipher the news: Carroll Byrd had given away the downstairs furnishings and the Oriental rugs to several distant relations, who showed up in U-Hauls to claim them and cart them away. Then she fired the housekeeper. She hired Norman Estep, a local ne'er-do-well and jack-of-all-trades, to knock down the walls between the kitchen and the dining room and the parlor, and paint everything white, including "that beautiful paneling." ("Have you *ever*?") Next, several huge wooden crates arrived for Carroll Byrd from Maine, and Norman went to the train station and  
20 picked them up in his truck and took them to her house.

For Carroll Byrd was a painter, it developed. Not a housepainter, of course, but the other kind—an *artist*. The minute I heard this, a long shudder ran from the top of my head to my feet. An *artist*. Of course! She had decided to stay on in her father's house because she loved the light down here as spring came on.

30 "The what?" Mama asked, puckering up her mouth as she talked on the phone to Jinx's\* mother. "I mean, it's light up in Maine, too, isn't it?"

35 Well yes, but Carroll Byrd feels that there is a *special quality* to the light here in Virginia that she just has to capture on canvas. So now Norman Estep is building frames, huge frames, for her canvases. And now he's going all around to junkyards for pieces of iron, and now he's  
40 buying welding tools at Southern States Supply. For her *sculptures*—turns out she's a sculptor, too. Newly elevated to a position of importance by his privileged relationship with Carroll Byrd, Norman Estep is grilled mercilessly by all the women in town, and clams up. Now he won't tell  
45 anybody anything. Neither what she's painting, nor what she wears, nor what in the world she does out there all day long by herself. Norman Estep buys groceries for her in the

Piggly Wiggly, consulting a list penned in a stark angular hand. He won't even tell anybody what she eats! He is completely loyal to Carroll Byrd.

50 But the women turn against her. They drive out there to welcome her, two by two, carrying cakes or pies or casseroles or congealed salad, to be met cordially at the door by the artist herself, who does not ask them in. She  
55 responds politely to their questions but does not initiate any topics herself. Finally, in some consternation, the women turn on their heels and lurch off down the long walk, but not before noticing that she's made a huge mess of the patio—why, it's got an old iron gate and pieces of junk  
60 from the junkyard piled right in the middle of it, some of them welded together into this awful-looking construction that Mama swears is a human figure but Jinx's mama says is no such thing—and not before seeing that Carroll Byrd's gotten Norman Estep to plow up all that pretty grass in  
65 front of the house for a big vegetable garden, of all things! No lady has a vegetable garden, and no person in their right mind would put such a garden *in front* of a nice house, anyway. ("Lovely home," Mama always says.)

70 Several weeks after accepting the food, Carroll Byrd sends Norman around to deliver the plates and containers back to their original owners, each with its terse little thank-you note attached, written on fine creamy paper with raised initials.

75 This paper seems to make Mama madder than anything yet. ("I'll swear! It's certainly not like she *doesn't know any better*.") By then it is clear to all that Carroll Byrd is determined to be as much of a hermit as her father was, even more of one, and in the way of small towns, everybody stops badgering her and even begins to take a  
80 perverse pride in her eccentricity. "See that long driveway goes right up that way?" a visitor might be told. "There's a world-famous woman artist lives up there all by herself. Never goes past the gate."

\*Jinx: the narrator's cousin

"Live Bottomless," from *News of the Spirit* by Lee Smith, copyright © 1997 by Lee Smith. Used by permission of G.P. Putnam's Sons, a division of Penguin Group (USA) Inc. UK rights granted by permission of Darhansoff & Verrill Literary Agency.

13. In line 3, "material" most nearly means

- (A) substance
- (B) information
- (C) adequate equipment
- (D) suitable candidate
- (E) admissible evidence



14. In lines 4-5 (“Mama . . . news”), the distinction drawn by the narrator is most similar to that between which of the following?
- (A) A broadcast viewer and a television reporter
  - (B) A newspaper columnist and an editorial writer
  - (C) A magazine editor and a commercial advertiser
  - (D) A debate moderator and a political candidate
  - (E) An interview host and a controversial guest
15. The reference to England (line 9) suggests that Mama thinks that the furniture is
- (A) of high quality and cost
  - (B) of a style unsuitable for a small town
  - (C) of a period that now seems musty
  - (D) popular in construction and design
  - (E) too traditional for its new owner
16. Lines 15-25 chiefly describe Carroll Byrd’s
- (A) generosity toward barely familiar relatives
  - (B) ability to be ruthless when necessary
  - (C) poor judgment of people’s characters
  - (D) personalization of a new living environment
  - (E) rapid accumulation of various objects
17. In line 26, “developed” most nearly means
- (A) matured
  - (B) increased
  - (C) acquired
  - (D) made available
  - (E) became clear
18. The reference by Mama to the light in Maine (lines 33-34) suggests that she
- (A) suspects that Jinx’s mother is having fun at her expense
  - (B) does not understand Carroll Byrd’s artistic notions
  - (C) is entertained by the trivial nature of Carroll Byrd’s profession
  - (D) is fearful that Carroll Byrd will take up permanent residence in Virginia
  - (E) considers herself a shrewder judge of character than Jinx’s mother is
19. The passage suggests that “all the women in town” (line 44) are particularly irritated by Norman Estep’s
- (A) lately assumed air of self-importance
  - (B) reticence regarding Carroll Byrd’s activities
  - (C) unprecedented display of industriousness
  - (D) servile surrender of personal autonomy
  - (E) refusal to introduce them to Carroll Byrd
20. Carroll Byrd responds to the women who “drive out there to welcome her” (lines 51-52) in a way that can best be described as
- (A) seemingly appreciative but in fact insulted
  - (B) outwardly calm but in fact furious
  - (C) superficially friendly but in fact aloof
  - (D) nonplussed yet amused
  - (E) resentful yet forgiving
21. The “awful-looking construction” (line 61) that the narrator’s and Jinx’s mothers disagree over is best understood to be
- (A) Norman Estep’s property
  - (B) excavating machinery
  - (C) a piece of furniture
  - (D) a collection of refuse
  - (E) an abstract sculpture



22. The “big vegetable garden” (line 65) is perceived as

- (A) a mockery of small-town values of self-sufficiency
- (B) a violation of both propriety and common sense
- (C) a celebration of practicality as an artistic statement
- (D) an act of defiance against the neighbors
- (E) an attempt to obscure nefarious activities

23. Lines 76-80 (“By then . . . eccentricity”) indicate a

- (A) forced realignment of interests
- (B) strategic concession to authority
- (C) novel solution to a problem
- (D) pronounced change in attitude
- (E) cleverly crafted compromise

**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.

**SECTION 3**

Time — 25 minutes

24 Questions

**Turn to Section 3 (page 4) 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. Although most people in the early years of the Internet explored only ----- uses of computer networks, some unscrupulous people took advantage of the technology's potential for -----.
- (A) forbidden . . fraud  
 (B) thrifty . . business  
 (C) unusual . . stability  
 (D) valid . . education  
 (E) legitimate . . mischief
2. Difficult working conditions that ranged from merely ----- to extremely intimidating were the norm for jazz performer Billie Holiday.
- (A) engaging (B) daunting (C) uniform  
 (D) congenial (E) abominable
3. Jessica's smile ----- her sorrow, hiding her feelings from everyone except those who knew her best.
- (A) belied (B) rendered (C) defiled  
 (D) embedded (E) deployed

4. In contrast to chimpanzees, who are extroverted exhibitionists, orangutans are ----- by nature.
- (A) cooperative (B) demonstrative  
 (C) harmless (D) amusing  
 (E) retiring
5. Recognizing that time was a critical factor, the paramedics responded to the call with -----.
- (A) impunity (B) autonomy (C) celerity  
 (D) uncertainty (E) equanimity
6. The newest member of the research team, not wanting to appear -----, refrained from ----- any criticism of the principal scientist's plan for completing the project.
- (A) ambivalent . . evaluating  
 (B) inquisitive . . voicing  
 (C) presumptuous . . venturing  
 (D) censorious . . undermining  
 (E) didactic . . condoning
7. Because his themes and use of imagery are highly eccentric, painter Sigmar Polke is said to have ----- style.
- (A) an idiosyncratic (B) a plangent (C) a florid  
 (D) an archaic (E) an insipid
8. Some scientists believe that Adélie penguins may be ----- of global warming, that their population decline may presage climatic changes throughout Antarctica.
- (A) figments (B) purveyors (C) vestiges  
 (D) derivatives (E) harbingers



Each passage below is followed by questions based on its content. Answer the questions on the basis of what is stated or implied in each passage and in any introductory material that may be provided.

Questions 9-10 are based on the following passage.

In many accounts of the American West, the Lewis and Clark expedition (1803-1806) mistakenly marks the beginning of recorded history, with the captains' journals constituting a baseline of information about the region.

The earlier history of the West is frequently seen as an unimportant backstory. Although the Lewis and Clark expedition was a momentous event, it was only a subplot in a historical drama of time, place, and people that had been playing for thousands of years. The "new lands" that Lewis and Clark explored were in fact very old: the explorers did not bring the West into United States history; they brought the United States into the history of the West.

9. The author's attitude toward the "many accounts of the American West" (line 1) is best characterized as

- (A) bewildered
- (B) contemptuous
- (C) critical
- (D) neutral
- (E) nostalgic

10. In context, the metaphor in lines 7-9 ("it was . . . years") chiefly serves to

- (A) call attention to the age of the United States as a nation
- (B) stress the enormous size of the American West
- (C) question the literary value of the writings by Lewis and Clark
- (D) trivialize the accomplishments of the Lewis and Clark expedition
- (E) place the Lewis and Clark expedition into a broad context

Questions 11-12 are based on the following passage.

As the chimps moved closer, catching sight of us on the ground, their excitement didn't lessen—but it changed. Suddenly they looked surprised and perplexed. We could see ourselves registering weirdly on their consciousness.

They showed neither fear nor menace; they were curious. They settled onto limbs just above our heads and lingered there, gawking and chattering. One female chimp held an infant whose large ears stuck far out from its head, glowing amber like a pair of huge dried apricots whenever they caught backlighting from a shaft of sunlight. I gaped at the little fellow. His face was tranquil, his eyes widened by innocent wonder. He and his mother gaped calmly back.

11. In line 4, "registering" most nearly means

- (A) enrolling
- (B) aligning
- (C) achieving
- (D) storing up
- (E) being recorded

12. The author suggests that the chimps' behavior could be characterized as all of the following EXCEPT

- (A) unintimidated
- (B) inquisitive
- (C) mischievous
- (D) endearing
- (E) puzzled



Questions 13-24 are based on the following passage.

*In this excerpt adapted from a 1995 novel, the narrator, Olivia, recalls a time when, at the age of six, she learned that she had an older half sister, Kwan, living in China. Olivia and Kwan had the same father. After their father died, Olivia's mother invited Kwan to come live with the family in the United States.*

My mother had always suffered from a kind heart, compounded by seasonal rashes of volunteerism. One summer, she was a foster mother of Yorkie Rescue; the house still stinks of dog. For two Christmases, she dished out food to the homeless at St. Anthony's Dining Room; now she goes away to Hawaii with her boyfriend. She's circulated petitions, done fund-raising, served on boards of alternative-health groups. While her enthusiasm is genuine, eventually, always, it runs out and then she's on to something new. I suspect she thought of Kwan as a foreign exchange student she would host for a year, a Chinese Cinderella, who would become self-sufficient and go on to have a wonderful American life.

During the time before Kwan came, Mom was a cheerleader, rallying my brothers and me to welcome a big sister into our lives. Tommy was too little to do anything except nod whenever Mom said, "Aren't you excited about having another big sister?" Kevin just shrugged and acted bored. I was the only one who did jumping jacks like a gung-ho recruit, in part because I was ecstatic to learn Kwan would be *in addition* to me, not *instead of*.

Although I was a lonely kid, I would have preferred a new turtle or even a doll, not someone who would compete for my mother's already divided attention and force me to share the meager souvenirs of her love. In recalling this, I know that my mother loved me—but not absolutely. When I compared the amount of time she spent with others—even total strangers—I felt myself sliding further down the ranks of favorites, getting bumped and bruised. She always had plenty of room in her life for dates with men or lunch with her so-called gal pals. With me, she was unreliable. Promises to take me to the movies or the public pool were easily erased with excuses or forgetfulness, or worse, sneaky variations of what was said and what was meant: "I hate it when you pout, Olivia," she once told me. "I didn't *guarantee* I'd go to the swim club with you. I said I would *like to*." How could I argue my need against her intention?

I learned to make things not matter, to put a seal on my hopes and place them on a high shelf, out of reach. And by telling myself that there was nothing inside those hopes anyway, I avoided the wounds of deep

disappointment. The pain was no worse than the quick sting of a booster shot. And yet thinking about this makes me ache again. How is it that as a child I knew I should have been loved more? Is everyone born with a bottomless emotional reservoir?

So of course, I didn't want Kwan as my sister. Just the opposite. Which is why I made great efforts in front of my mother to appear enthusiastic. It was a distorted form of inverse logic: If hopes never come true, then hope for what you don't want.

Mom had said that a big sister was a bigger version of myself, sweet and beautiful, only more Chinese, and able to help me do all kinds of fun things. So I imagined not a sister but another me, an older self who danced and wore slinky clothes, who had a sad but fascinating life, like an Asian version of Natalie Wood in *West Side Story*, which I saw when I was five.

One night, before my mother tucked me in bed, she asked me if I wanted to pray. So I prayed to God to help me be good. And then I added that I hoped my big sister would come soon, since my mother had just been talking about that. When I said, "Amen," I saw she was crying and smiling proudly. Under my mother's eye I began to collect welcome presents for Kwan. The scarf my aunt Betty gave me for my birthday, the orange blossom cologne I received at Christmas, the gooey Halloween candy—I lovingly placed all these scratchy, stinky, stale items into a box my mother had marked "For Olivia's big sister." I convinced myself I had become so good that soon Mom would realize we didn't need another sister.

13. In lines 1-2 ("My . . . volunteerism"), the narrator achieves a humorous effect by

- (A) likening a charitable cause to an act of diplomacy
- (B) playing on two different meanings of the word "kind"
- (C) exaggerating her mother's neglect of her children's needs
- (D) describing a personality trait as if it were a medical condition
- (E) adopting a grandiose tone to address a trivial subject





14. Which best describes the structure of each of the sentences in lines 2-6 (“One . . . boyfriend”)?
- (A) A description of an initial impression followed by a considered opinion  
 (B) A description of an unpleasant activity followed by a nostalgic reminiscence  
 (C) A description of a praiseworthy activity followed by a snide observation  
 (D) A statement of lofty intention followed by a contrasting secret motive  
 (E) A statement of fact followed by a tentative explanation
15. In line 9, “runs out” most nearly means
- (A) flees  
 (B) completes  
 (C) expires  
 (D) expels  
 (E) flows
16. The narrator uses the word “rallying” (line 15) to describe an attempt to
- (A) overcome defeat  
 (B) soothe anxiety  
 (C) restore order  
 (D) encourage competition  
 (E) arouse enthusiasm
17. Which best describes how the narrator as a young girl reacted to the question in lines 17-18 (“Aren’t . . . sister”)?
- (A) She was amused at the irony of the word “excited.”  
 (B) She was elated by the implications of the word “another.”  
 (C) She was proud to be referred to as a “big sister.”  
 (D) She was surprised at the depth of her mother’s concern.  
 (E) She was gratified to observe her brothers’ responses.
18. Kevin responded to the prospect of “having another big sister” (line 18) with
- (A) ambivalence  
 (B) impatience  
 (C) unconcern  
 (D) trepidation  
 (E) skepticism
19. The narrator mentions the “new turtle” (line 24) as an example of something that might have
- (A) eased her loneliness after a family upheaval  
 (B) provided companionship without threatening her position in the family  
 (C) helped her to develop a sense of responsibility and commitment  
 (D) been a symbol to her of slow but steady progress  
 (E) entertained her more regularly than her mother did
20. In lines 33-45 (“With . . . shot”), the narrator describes a transition from
- (A) discontent to open rebellion  
 (B) apprehension to abject fear  
 (C) pride to self-deception  
 (D) frustration to furtive resistance  
 (E) disappointment to willed indifference
21. With the question in line 39 (“How . . . intention?”), the narrator suggests that
- (A) her need for special treatment was diminished  
 (B) her mother had acted from noble motives  
 (C) she did not really want to go to the swim club  
 (D) she could not adequately respond to her mother  
 (E) she no longer needed her mother’s attention



22. In context, lines 54-55 (“a big sister . . . Chinese”) are best seen as

- (A) a purposeful use of flattery
- (B) a misrepresentation of known facts
- (C) an implicit reference to a magical person
- (D) proof of the mother’s interest in China
- (E) evidence of Kwan’s generous nature

23. In line 66, “eye” most nearly means

- (A) viewpoint
- (B) observation
- (C) opening
- (D) center
- (E) judgment

24. In lines 71-73 (“I convinced . . . sister”), the narrator suggests that as a young girl she

- (A) wanted to grow up to be like her mother
- (B) regretted having mistreated her brothers
- (C) could not conceive of an improved relationship with her mother
- (D) failed to see the advantages of a large family
- (E) felt a need to prove her adequacy as a daughter

**S T O P**

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.



## SECTION 4

Time — 25 minutes

20 Questions

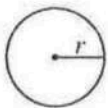
Turn to Section 4 (page 5) of your answer sheet to answer the questions in this section.

**Directions:** For this section, solve each problem and decide which is the best of the choices given. Fill in the corresponding circle on the answer sheet. You may use any available space for scratch work.

Notes

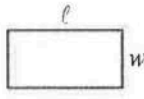
- The use of a calculator is permitted.
- All numbers used are real numbers.
- Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
- Unless otherwise specified, the domain of any function  $f$  is assumed to be the set of all real numbers  $x$  for which  $f(x)$  is a real number.

Reference Information

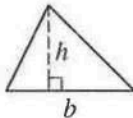


$$A = \pi r^2$$

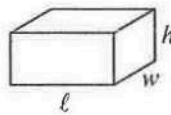
$$C = 2\pi r$$



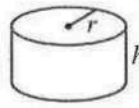
$$A = \ell w$$



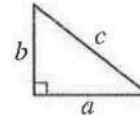
$$A = \frac{1}{2}bh$$



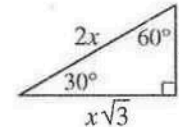
$$V = \ell wh$$



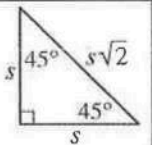
$$V = \pi r^2 h$$



$$c^2 = a^2 + b^2$$



Special Right Triangles

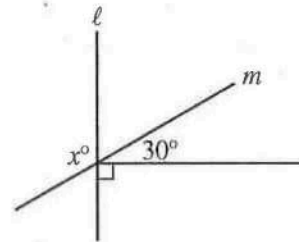


The number of degrees of arc in a circle is 360.

The sum of the measures in degrees of the angles of a triangle is 180.

1. The fraction  $\frac{x}{24}$  is equal to 0.75. What is the value of  $x$ ?

- (A) 3  
(B) 6  
(C) 9  
(D) 18  
(E) 36



2. In the figure above, a line segment intersects lines  $l$  and  $m$  at a point. What is the value of  $x$ ?

- (A) 120  
(B) 130  
(C) 140  
(D) 150  
(E) 160

GO ON TO THE NEXT PAGE



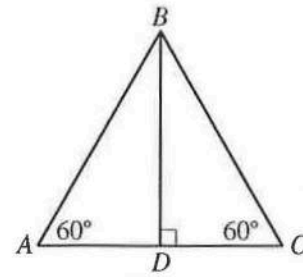
$x$	$y$
0	2
1	4
2	6
3	8
4	10

3. Based on the pairs of values in the table above, which of the following could express a relationship between  $x$  and  $y$ ?

- (A)  $y = x + 2$   
 (B)  $y = 2x$   
 (C)  $y = 2x + 2$   
 (D)  $y = 3x$   
 (E)  $y = 3x + 2$

4. The City Water Bureau charges a company a rate of \$1.50 for each 1,000 gallons of water used plus a flat monthly fee of \$20. If a company's water bill was \$80 for one month, how many gallons of water were used?

- (A) 10,000  
 (B) 20,000  
 (C) 30,000  
 (D) 40,000  
 (E) 60,000



5. In the figure above, the length of  $\overline{BC}$  is 8. What is the length of  $\overline{AD}$ ?

- (A) 3  
 (B) 4  
 (C) 4.5  
 (D)  $4\sqrt{2}$   
 (E)  $4\sqrt{3}$

6. If  $\frac{7}{x} + 2 = 5$ , what is the value of  $x$ ?

- (A) -7  
 (B) -3  
 (C) 1  
 (D)  $\frac{3}{7}$   
 (E)  $\frac{7}{3}$



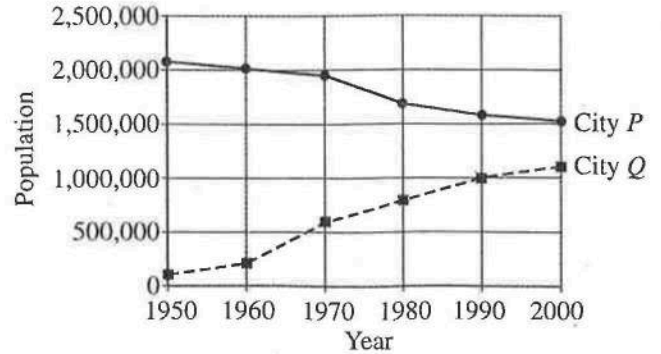
7. If Jake is 3 feet 5 inches tall and his father is 29 inches taller than Jake, how tall is his father? (1 foot = 12 inches)

(A) 5 ft 8 in  
 (B) 5 ft 10 in  
 (C) 6 ft 2 in  
 (D) 6 ft 4 in  
 (E) 7 ft 0 in

8. For the function  $f$ ,  $f(1) = 2$  and  $f(2) = 1$ . Which of the following equations could define the function  $f$ ?

(A)  $f(x) = x + 1$   
 (B)  $f(x) = x - 1$   
 (C)  $f(x) = -x + 3$   
 (D)  $f(x) = -2x + 5$   
 (E)  $f(x) = 2x - 1$

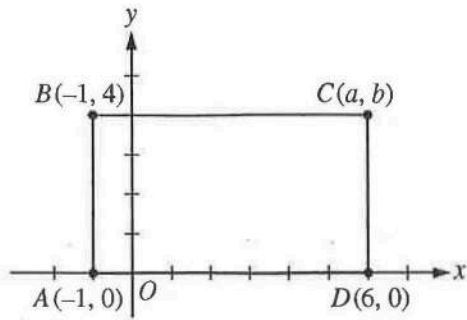
POPULATIONS OF TWO CITIES



9. The line graphs above show the populations of City  $P$  and City  $Q$  recorded every 10 years from 1950 to 2000. In what year shown was the population of City  $Q$  closest to half the population of City  $P$ ?
- (A) 1950  
 (B) 1960  
 (C) 1970  
 (D) 1980  
 (E) 1990

10. Which of the following is NOT equivalent to  $6m^2$ ?

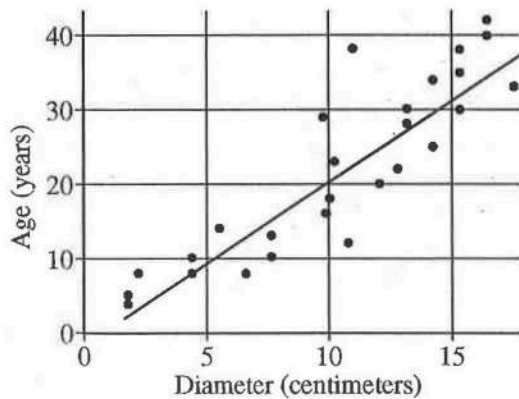
(A)  $(3m)(3m)$   
 (B)  $6m(m)$   
 (C)  $(m\sqrt{6})^2$   
 (D)  $m^2(3+3)$   
 (E)  $3m^2 + 3m^2$



11. In the  $xy$ -plane above,  $ABCD$  is a rectangle. What is the value of  $a + b$ ?

- (A) 3
- (B) 5
- (C) 6
- (D) 7
- (E) 10

DIAMETER AND AGE OF TREES

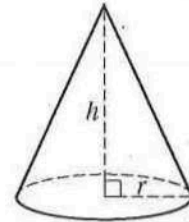


12. The scatterplot above shows the diameter and age of a group of 27 trees of a single type and the line of best fit for the data. According to the line of best fit, which of the following best approximates the age, in years, of a tree of this type with diameter 13 centimeters?

- (A) 14
- (B) 18
- (C) 22
- (D) 26
- (E) 30

13. If  $1 - (x - y)^2 = 0$ , which of the following could be the value of  $x - y$ ?

- I. -1
  - II. 0
  - III. 1
- (A) I only
  - (B) II only
  - (C) III only
  - (D) I and III
  - (E) II and III



Note: Figure not drawn to scale.

14. The right circular cone above has a base radius of 4 inches and a volume of  $32\pi$  cubic inches. What is the height, in inches, of the cone? (The volume of a right circular cone with base radius  $r$  and height  $h$  is  $\frac{1}{3}\pi r^2 h$ .)

- (A) 6
- (B) 8
- (C) 12
- (D) 16
- (E) 24



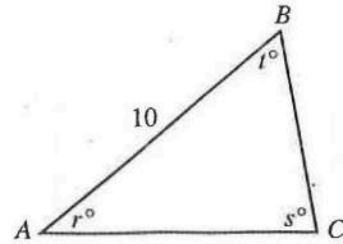
36, 4, 20, ...

15. The first term of the sequence above is 36, and the second term is 4. Each term after the second is the average (arithmetic mean) of the two preceding terms. Which term of the sequence is the first that is not an integer?

- (A) The fourth term  
(B) The fifth term  
(C) The sixth term  
(D) The seventh term  
(E) The eighth term

16. Used bicycles at Ezzo's Bicycle Shop range in cost from \$80 to \$200. If  $c$  represents the cost, in dollars, of a used bicycle at this bicycle shop, which of the following statements must be true?

- (A)  $|c - 140| = 60$   
(B)  $|c + 140| = 60$   
(C)  $|c - 140| \leq 60$   
(D)  $|c + 140| \leq 60$   
(E)  $|c - 140| \geq 60$



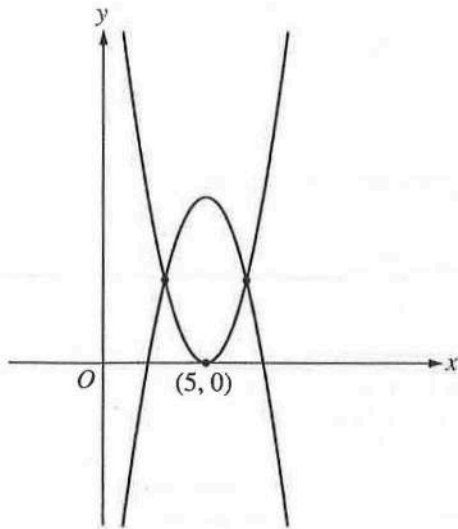
Note: Figure not drawn to scale.

17. In  $\triangle ABC$  above,  $r < t < s$ . Which of the following could be true?

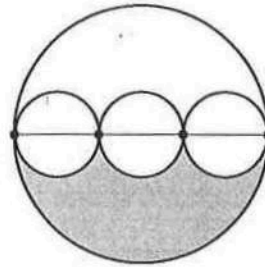
- (A)  $BC = 4$  and  $AC = 5$   
(B)  $BC = 8$  and  $AC = 9$   
(C)  $BC = 9$  and  $AC = 8$   
(D)  $BC = 9$  and  $AC = 11$   
(E)  $BC = 12$  and  $AC = 11$

18. The median of a list that consists of eleven different numbers is  $m$ . If the least and greatest numbers are excluded from the list, the median of the nine numbers in the resulting list is  $p$ . Which of the following statements must be true?

- (A)  $p = \frac{9}{11}m$   
(B)  $p = \frac{11}{9}m$   
(C)  $p = m - 2$   
(D)  $p = m$   
(E)  $p = m + 2$



19. In the figure above, the two parabolas intersect at  $(3, 4)$  and  $(7, 4)$ . The equation of one parabola is  $y = x^2 - 10x + 25$ , and the equation of the other parabola is  $y = -x^2 + bx + c$ , where  $b$  and  $c$  are constants. What is the value of  $c$ ?
- (A)  $-25$   
 (B)  $-23$   
 (C)  $-21$   
 (D)  $-19$   
 (E)  $-17$



20. In the figure above, the intersecting circles are tangent at the indicated points. The centers of all the circles lie on a line. The diameter of the large circle is  $d$  and the three small circles are congruent. What is the perimeter of the shaded region, in terms of  $d$ ?
- (A)  $\frac{\pi d}{2}$   
 (B)  $\frac{5\pi d}{6}$   
 (C)  $\pi d$   
 (D)  $\frac{4\pi d}{3}$   
 (E)  $2\pi d$

**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.



**SECTION 5**

Time — 25 minutes

25 Questions

**Turn to Section 5 (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. Janet's ----- was evident to everyone in the room because she glanced around at them -----.

- (A) guilt . . . confidently  
 (B) anxiety . . . calmly  
 (C) conviction . . . uneasily  
 (D) hopefulness . . . gloomily  
 (E) suspicion . . . distrustfully

2. Early twentieth-century writers Ernest Hemingway and Edna St. Vincent Millay owed much of their public visibility to self-promotion: both were adept at ----- their own literary works.

- (A) marketing (B) modernizing (C) duplicating  
 (D) finalizing (E) editing

3. Chemistry professor Mande Holford learned about the National Science Foundation fellowship program in ----- way: she happened across an advertisement for it in a magazine she read during jury duty.

- (A) an orthodox (B) an anachronistic  
 (C) a fortuitous (D) a dilatory  
 (E) a nefarious

4. Many today would consider Phillis Wheatley to have been remarkably -----: by age 12 she was studying Latin, and soon after, she was translating Ovid into English.

- (A) taciturn (B) rambunctious (C) garrulous  
 (D) precocious (E) winsome

5. The philosopher claimed that we humans are essentially -----, given to dissembling in order to further our interests.

- (A) altruistic (B) redoubtable (C) pugnacious  
 (D) duplicitous (E) complacent



Each passage below is followed by questions based on its content. Answer the questions on the basis of what is stated or implied in each passage and in any introductory material that may be provided.

Questions 6-7 are based on the following passage.

Line  
5 What embodies the bounty of nature better than an ear  
of corn? With a twist of the wrist it is easily plucked from  
the stalk with no waste or fuss. It is packed with tasty,  
nutritious kernels that are larger and more numerous than  
10 those of other grains. Wrapped up in a protective leafy  
husk, corn appears to be a gift from nature. But  
appearances can be deceptive. A cultivated field of corn, or  
any other crop, is as human made as a microchip. Much as  
we like to think of farming as natural, farmed land is as  
10 much a technological landscape as a biological one.

6. The passage is ultimately concerned with

- (A) discussing the history of industrialized farming
- (B) challenging a common assumption about farming
- (C) comparing corn to other types of grains
- (D) enumerating the various uses of corn
- (E) revealing how technology enhances corn production

7. Which best describes the function of the sentence in lines 6-7 (“But . . . deceptive”)?

- (A) It serves as an example.
- (B) It adds a humorous note.
- (C) It summarizes previous comments.
- (D) It answers an objection.
- (E) It shifts the focus.

Questions 8-9 are based on the following passage.

African American publishing entrepreneur  
John H. Johnson (1918–2005) had a significant impact  
on American business practices. By successfully disproving  
Line  
5 a common assumption about marketing and media in the  
early twentieth century—that a single message and  
medium could reach all Americans—Johnson helped make  
possible everything from Telemundo to *Ms.* magazine. The  
very nature of contemporary media hinges on the concept  
demonstrated by Johnson—the profitability of targeting  
10 specific niches of consumers, segmented by ethnicity, age,  
and other demographic characteristics. Johnson devised  
techniques and concepts whose effectiveness now benefits  
many American businesses and even multinational  
corporations facing the challenge of marketing goods and  
15 services to a globally diverse population.

8. The passage as a whole primarily serves to

- (A) discuss an important event in media history
- (B) describe the impact made by an influential individual
- (C) take a stand in an ongoing public debate
- (D) offer a theory about the motives of a media pioneer
- (E) elaborate on the challenges of marketing to diverse groups

9. In context, “Telemundo” and “*Ms.* magazine” (line 7) serve as examples of media that

- (A) devised similar marketing techniques
- (B) were created by the same media visionary
- (C) underwent profound changes as a result of Johnson’s work
- (D) promoted the use of demographic information
- (E) were designed to appeal to particular groups of consumers



Questions 10-15 are based on the following passage.

*This passage is adapted from a 1986 book about life in the Arctic.*

Line  
5 The vision most of us have of migration is of movements on a large scale, of birds arriving at their wintering grounds, of spawning salmon moving upstream, or of wildebeest, zebra, and gazelle trekking over the plains of East Africa. The movements of these grazing animals coincide with a pattern of rainfall in the Serengeti-Mara ecosystem, and their annual, roughly circular migration in the wake of the rains reveals a marvelous and intricate network of benefits to all the organisms involved—grazers, 10 grasses, and predators.

The dependable arrival of swallows at the Mission San Juan Capistrano, the appearance of gray whales off the Oregon coast in March, and the movement of animals like elk from higher to lower ranges in Wyoming in the fall are 15 examples of migration in North America. I first went into the North American Arctic with no other ideas than these somewhat outsize events to guide me. They opened my mind sufficiently, however, to a prodigious and diverse movement of life through the Arctic; they also prompted a realization of how intricate these seemingly simple 20 natural events are. And as I watched the movement of whales and birds and caribou, I thought I discerned the ground from which some people have derived so much of their understanding of symmetry, cadence, and harmony in the universe. 25

Several different kinds of migration are going on in the Arctic at the same time, not all of them keyed to Earth's annual cycle. Animals are still adjusting to the retreat of the Pleistocene glaciers, which began about 20,000 years ago. 30 Some temperate-zone species are moving gradually but steadily northward, altering their behavior or, like the collared lemming and the arctic fox, growing heavier coats of fur as required.

The extent of all this movement is difficult to hold in the mind. Deepening the complications is that within the rough 35 outlines of their traditional behaviors, animals are always testing the landscape. They are always responding to hints and admonitions not evident to us.

The movement of animals in the Arctic is especially 40 compelling because the events are compressed into but a few short months. Migratory animals like the bowhead whale and the snow goose often arrive on the last breath of winter. They feed and rest, bear their young, and prepare for their southward journey in that window of light before 45 freeze-up and the first fall snowstorms. They come north in staggering numbers, travel hundreds or even thousands of miles to be here during those few weeks when life swirls in the water and on the tundra and in the balmy air. Standing

50 there on the ground, one can feel the land filling up, feel something physical rising in it under the influence of the light, an embrace or exaltation. Watching the animals come and go, and feeling the land swell up to meet them and then feeling it grow still at their departure, I came to think of the migrations as breath, as the land breathing. In spring a great 55 inhalation of light and animals. The long-bated breath of summer. And an exhalation that propels them all south in the fall.

10. In line 1, "vision" most nearly means

- (A) eyesight
- (B) conception
- (C) revelation
- (D) manifestation
- (E) anticipation

11. The author presents the group of "events" (line 17) as

- (A) an unsettling possibility
- (B) an overly ambitious goal
- (C) a necessary distraction
- (D) a useful starting point
- (E) a lifelong source of inspiration

12. Which does the author imply about "the collared lemming and the arctic fox" (lines 31-32) ?

- (A) They became extinct in the Pleistocene epoch.
- (B) They migrate annually to temperate-zone areas.
- (C) They have remained fundamentally unchanged for thousands of years.
- (D) Their movement northward is not associated with seasonal cycles.
- (E) Their coats thicken independently of local circumstances.

13. The "window of light" (line 44) most nearly refers to a

- (A) surprising moment of danger
- (B) sudden burst of understanding
- (C) short period of hospitable weather
- (D) small region of suitable terrain
- (E) temporary condition of high visibility



14. The author describes the “few weeks” (line 47) in a tone best characterized as

- (A) sorrowful
- (B) dismissive
- (C) apprehensive
- (D) jovial
- (E) awestruck

15. The final paragraph of the passage serves primarily to

- (A) summarize an account of a gradual change
- (B) convey a personal reaction to an occurrence
- (C) outline a bold new theory regarding an event
- (D) provide an explanation for a seeming contradiction
- (E) introduce an unusual example of an annual process



Questions 16-25 are based on the following passage.

The passage below is adapted from a 2010 article on Shigeru Miyamoto, who created some of the most famous and popular video games of the twentieth century.

Line  
5  
10  
15  
20  
25  
30  
35  
40  
45

When Shigeru Miyamoto was a child, he didn't really have any toys, so he made his own, out of wood and string. He put on performances with homemade puppets and made cartoon flip-books. He pretended that there were magical realms hidden behind the sliding shoji screens in his family's little house. There was no television. His parents were of modest means but hardly poor. This was in the late nineteen-fifties and early nineteen-sixties, in the rural village of Sonobe, about thirty miles northwest of Kyoto, in a river valley surrounded by wooded mountains. As he got older, he wandered farther afield, on foot or by bike. He explored a bamboo forest behind the town's ancient Shinto shrine and bushwhacked through the cedars and pines on a small mountain near the junior high school. One day, when he was seven or eight, he came across a hole in the ground. He peered inside and saw nothing but darkness. He came back the next day with a lantern and shimmied through the hole and found himself in a small cavern. He could see that passageways led to other chambers. Over the summer, he kept returning to the cave to marvel at the dance of the shadows on the walls.

Miyamoto has told variations on the cave story a few times over the years, in order to emphasize the extent to which he was surrounded by nature, as a child, and also to claim his youthful explorations as a source of his aptitude and enthusiasm for inventing and designing video games. The cave has become a misty but indispensable part of his legend, to Miyamoto what the cherry tree was to George Washington. It is also a prototype, an analogue, and an apology—an illuminating and propitious way to consider his games, or, for that matter, anyone else's. It flatters a vacant-eyed kid with a joystick (to say nothing of the grownups who have bought it for him or sold it to him) to think of himself, spiritually, as an intrepid spelunker. The cave, certainly, is an occasion for easy irony: the man who has perhaps done more than any other person to entice generations of children to spend their playtime indoors, in front of a video screen, happened to develop his peculiar talent while playing outdoors, at whatever amusements or mischief he could muster. Of course, no one in the first wave of video-game designers could have learned the craft by playing video games, since video games didn't exist until people like Miyamoto invented them. Still, there may be no starker example of the conversion of primitive improvisations into structured, commodified, and stationary technological simulation than that of Miyamoto, the rural explorer turned ludic mastermind.\*

50 In his games, Miyamoto has always tried to re-create his childhood wonderment, if not always the actual experiences that gave rise to it, since the experiences themselves may be harder to come by in a paved and partitioned world. "I can still recall the kind of sensation I had when I was in a small river, and I was searching with my hands beneath a rock, and something hit my finger, and I noticed it was a fish," he told me one day. "That's something that I just can't express in words. It's such an unusual situation. I wish that children nowadays could have similar experiences, but it's not very easy."

\* expert on games

"Master of Play" by Nick Paumgarten, originally published in *The New Yorker*, December 20, 2010, copyright © 2010 by Nick Paumgarten. Used by permission.

16. The primary purpose of the passage is to
- (A) evaluate the business acumen of a famous inventor
  - (B) examine the origins of a creative approach
  - (C) describe the factors that made a child's upbringing unusual
  - (D) outline a series of challenges that led to an important discovery
  - (E) discuss the declining interest in a popular pastime
17. In lines 1-6 ("When . . . house"), Miyamoto is depicted as a child who was
- (A) aloof and studious
  - (B) creative and defiant
  - (C) resourceful and imaginative
  - (D) anxious and intense
  - (E) enterprising and impatient
18. In lines 27-29 ("The cave . . . Washington"), the author uses an analogy in order to
- (A) reflect on the power of a new invention
  - (B) suggest the popularity of a form of entertainment
  - (C) praise the originality of an influential thinker
  - (D) emphasize the significance of an experience
  - (E) downplay the literary importance of a story



19. Which statement best describes how the cave functions as “a prototype” (line 29) ?
- (A) The cave symbolizes the intellectual curiosity of children in rural Japan during the 1950s.
  - (B) The cave provides an experience for one person that later may be simulated electronically for others.
  - (C) The cave makes a specific impression on a child who, in adulthood, describes the impression eloquently during an interview.
  - (D) The cave presents a logical puzzle whose solution resembles the programming of a modern computer.
  - (E) The cave represents a forbidden realm that can be replicated in visual imagery.
20. In lines 31-34 (“It flatters . . . spelunker”), the author indicates that those who play video games
- (A) develop useful problem-solving skills
  - (B) admire other game players excessively
  - (C) take pleasure in the games’ comforting repetitions
  - (D) see their games as symbolic of life’s struggles
  - (E) enjoy visualizing themselves as fearless explorers
21. The contrast between the “vacant-eyed kid” (line 32) and the “intrepid spelunker” (line 34) serves to
- (A) emphasize the differences between two generations
  - (B) convey a story of remarkable personal growth
  - (C) highlight a disconnect between perception and reality
  - (D) emphasize the increasing popularity of a pastime
  - (E) cast doubt on an accepted belief
22. The author indicates that the designers in the “first wave” (lines 40-41)
- (A) had no models to draw from
  - (B) were often avid game players
  - (C) were driven by financial considerations
  - (D) were influenced by their outdoor experiences
  - (E) had little experience with technology
23. In lines 43-47 (“Still, there . . . mastermind”), the author implies that Miyamoto’s experiences should be considered
- (A) a cataclysmic event
  - (B) an unexpected interlude
  - (C) an anomalous undertaking
  - (D) an overdue achievement
  - (E) a striking progression
24. In line 51, “partitioned” refers to which characteristic of modern childhood?
- (A) Diminished opportunity to roam among one’s surroundings
  - (B) Reduced access to potential friends in one’s neighborhood
  - (C) Stronger motivation to challenge restrictions on exploring
  - (D) Increased structure in the organization of shared activities
  - (E) Greater attention to educationally beneficial types of play
25. The quotation in lines 52-58 demonstrates Miyamoto’s
- (A) appreciation of his original mentors
  - (B) gratitude for his past experiences
  - (C) defiance of traditional expectations
  - (D) theoretical view of a predicament
  - (E) desire to create something new

**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.

**SECTION 6**

Time — 25 minutes

35 Questions

**Turn to Section 6 (page 6) 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.

The following sentences test correctness and effectiveness of expression. Part of each sentence or the entire sentence is underlined; beneath each sentence are five ways of phrasing the underlined material. Choice A repeats the original phrasing; the other four choices are different. If you think the original phrasing produces a better sentence than any of the alternatives, select choice A; if not, select one of the other choices.

In making your selection, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, sentence construction, and punctuation. Your selection should result in the most effective sentence—clear and precise, without awkwardness or ambiguity.

**EXAMPLE:**

Laura Ingalls Wilder published her first book and she was sixty-five years old then.

- (A) and she was sixty-five years old then
- (B) when she was sixty-five
- (C) at age sixty-five years old
- (D) upon the reaching of sixty-five years
- (E) at the time when she was sixty-five

(A) ● (C) (D) (E)

1. Built by scientists at the University of Pennsylvania during the Second World War, ENIAC being the first fully programmable electronic digital computer.
- (A) being
  - (B) having been
  - (C) will have been
  - (D) to be
  - (E) was

2. A piano prodigy who began to play jazz while he was in high school, Herbie Hancock has released his first solo jazz record in 1962, when he was in his early twenties.
- (A) Hancock has released
  - (B) Hancock is releasing
  - (C) Hancock released
  - (D) Hancock releases
  - (E) Hancock, he released
3. Because humming increases the airflow between sinuses and nasal cavities, therefore some scientists believe that it could help protect against sinus infections.
- (A) therefore some scientists believe
  - (B) the belief of some scientists are
  - (C) it is therefore believable by some scientists
  - (D) some scientists believing
  - (E) some scientists believe
4. Archaeologists, having raced to uncover ruins of the ancient kingdom of Kush in Northern Sudan before the construction of a new dam floods the area.
- (A) Archaeologists, having raced
  - (B) Archaeologists, having to race
  - (C) Archaeologists, who race
  - (D) Archaeologists are racing
  - (E) Archaeologists racing



5. The earliest transatlantic telegraph cable linking the North American and European continents were completed in 1866.
- (A) were completed  
(B) was completed  
(C) to be completed  
(D) have been completed  
(E) being completed
6. A small island forming part of the Scottish Hebrides, Luing has only about 200 inhabitants.
- (A) A small island forming part of  
(B) A small island it forms part of  
(C) A small island forms part of  
(D) It being a small island and it forms a part of  
(E) Forming part of, also it is a small island in
7. The baker explained that the custard would be firmer by allowing it to cool slightly before eating it.
- (A) by allowing it to cool slightly before eating it  
(B) by allowing the slight cooling of it before eating  
(C) by allowing it to cool slightly before being eaten  
(D) if allowed to cool slightly before eating it  
(E) if allowed to cool slightly before being eaten
8. While still an infant, the family moved to California where Janelle began surfing at age seven.
- (A) the family moved to California where Janelle  
(B) the family moved to California while Janelle  
(C) Janelle's family moved to California where she  
(D) Janelle moved with her family to California, where she  
(E) Janelle moved with her family to California at which she
9. The appeal of spices in medieval Europe arose from a combination of them having mysterious and distant origins, high prices and value as status symbols, and their mystical connotations.
- (A) them having mysterious and distant origins, high prices  
(B) their mysterious and distant origins, their high prices  
(C) its mysterious and distant origins, a high price  
(D) having mysterious and distant origins, a high price  
(E) mysterious and distant origins, as well as its high prices
10. A Cuban rumba song often begins with meaningless syllables, its lyrics then evolve either into those of a known song or are improvised by the singer.
- (A) syllables, its lyrics then evolve either  
(B) syllables, but its lyrics then either evolve  
(C) syllables, which then either evolving  
(D) syllables with lyrics then evolving either  
(E) syllables, then their lyrics either evolve
11. During the male courtship ritual of the periodical cicada (*Magicicada cassini*), a type of insect chiefly famous for its long hibernation, periods of synchronized singing alternate with periods of silence.
- (A) hibernation, periods of synchronized singing alternate  
(B) hibernation, they alternate periods of synchronized singing  
(C) hibernation that alternate periods of synchronized singing  
(D) hibernation, periods of synchronized singing alternating  
(E) hibernation alternate periods of synchronized singing





The following sentences test your ability to recognize grammar and usage errors. Each sentence contains either a single error or no error at all. No sentence contains more than one error. The error, if there is one, is underlined and lettered. If the sentence contains an error, select the one underlined part that must be changed to make the sentence correct. If the sentence is correct, select choice E. In choosing answers, follow the requirements of standard written English.

EXAMPLE:

The other delegates and him immediately  
 A B C  
 accepted the resolution drafted by the  
 D  
 neutral states. No error  
 E

(A) ● (C) (D) (E)

12. For those who suffer from seasonal allergies,  
 A

remaining indoors between the hours of 5:00 A.M.  
 B

and 10:00 A.M. are a good idea, since that is when  
 C

pollen is usually emitted. No error  
 D E

13. History at its best not only illuminates cultures  
 A

of the past and also helps later generations better  
 B C

understand their own culture. No error  
 D E

14. At an event celebrating international contemporary  
 A

writing, Anita Desai and her daughter Kiran Desai,

both a successful novelist, discussed the various  
 B C

influences on their careers. No error  
 D E

15. Blossoming extravagant each spring, the cherry trees  
 A

lining the streets of Washington, D.C., were given to  
 B C

the people of the United States by the people of Japan  
 D

in 1912. No error  
 E

16. The simple, truncated sentences that characterize the  
 A

writing of Ernest Hemingway are often easier  
 B

to follow than the more elaborate,  
 C

longer William Faulkner. No error  
 D E

17. Upon its completion the Washington Monument  
 A

became the world's tallest artificial structure, a  
 B

distinction it would hold only until the Eiffel Tower  
 C

is completed five years later. No error  
 D E



18. While copper, unlike gold, is not considered a glamorous metal, it has long been one of the world's valuable commodities. No error
- A B C D E
19. The number of telephone books distributed to homes and businesses in the United States each year have risen to over 540 million. No error
- A B C D E
20. Contrary to popular opinion, the readership of subscription magazines in print is actually increasing despite the phenomenal popularity of the Internet as a source of information and entertainment. No error
- A B C D E
21. Despite many animals gather and store seeds and other foodstuffs, humans are unique in deliberately planting and harvesting crops. No error
- A B C D E
22. While some scholars claim that the settlement was established around the year 1250, others doubt there to be human activity in the area before 1400. No error
- A B C D E
23. Egg tempera, a painting medium in which pigments are mixed with egg yolk, was favored by several prominent twentieth-century United States artists, including Social Realist painter Isabel Bishop. No error
- A B C D E
24. A military coup, the country's first, finally removed out of power the political party that had ruled the country with increasing heavy-handedness for decades. No error
- A B C D E
25. Mountain climbers must be able to perform dangerous climbing maneuvers while he or she carries heavy equipment at high altitudes, where oxygen levels are low. No error
- A B C D E



26. The purpose of the hearing was to determine  
A  
whether he or his sister was the rightful  
B C D  
owner of the house. No error  
E
27. Had Theresa rode a bicycle instead of driving to  
A B  
work, the additional travel time would have been  
C  
offset by the time she took to find parking. No error  
D E
28. Recent improvements in technologies allowing  
A  
depleted uranium to be reused makes the  
B  
debate about nuclear power more complicated  
C  
than it was decades ago. No error  
D E
29. Years ago we hiked the Inca trail without a tent  
A  
or stove, having been insured by a friend that  
B C  
we would find shelter and firewood along the way.  
D  
No error  
E

**Directions:** The following passage is an early draft of an essay. Some parts of the passage need to be rewritten.

Read the passage and select the best answers for the questions that follow. Some questions are about particular sentences or parts of sentences and ask you to improve sentence structure or word choice. Other questions ask you to consider organization and development. In choosing answers, follow the requirements of standard written English.

Questions 30-35 refer to the following passage.

- (1) Fingerprint evidence has been used to help solve crimes since the late nineteenth century, when it was discovered that each individual's fingerprints are unique. (2) You might well think that it is irrefutable, especially if you watch TV crime shows. (3) These suggest that the process of matching the fingerprints found at the scene of a crime with those of the suspect is foolproof. (4) This process, however, is not as precise as you might think. (5) We often make assumptions about the things we see on television.
- (6) Computers can analyze fingerprints, looking for points of similarity in the fingerprints' distinctive patterns. (7) Computers cannot conclusively match any two prints. (8) They can only select possible candidates for matching, and how many they select depends on the program they use. (9) A program designed to look for only a small number of similarities may choose hundreds of prints, which hardly helps to narrow the field of investigation. (10) A program designed to search for a large number of similarities may not come up with any matches.
- (11) After fingerprints have been selected by the computer as possible matches, they must be analyzed by human forensic experts. (12) These experts have to consider all the factors that may affect a fingerprint's appearance. (13) The fingerprints that people leave when they casually touch something are often smudged and incomplete, and fingerprints can vary depending on the kind of surface where they are deposited. (14) For these reasons forensic experts need to rely on training, experience, and judgment to determine whether two prints should be considered a match.



30. In context, which of the following phrases would most effectively replace the word “it” in sentence 2 (reproduced below) ?

*You might well think that it is irrefutable, especially if you watch TV crime shows.*

- (A) this history
  - (B) such dramatization
  - (C) that development
  - (D) this discovery
  - (E) such evidence
31. In context, what should be done to sentence 5 (reproduced below) ?
- We often make assumptions about the things we see on television.*
- (A) Make it the first sentence of the passage.
  - (B) Delete it from the passage.
  - (C) Change “We” to “Like others, we”.
  - (D) Change “see” to “have seen”.
  - (E) Add “and elsewhere” to the end of the sentence.
32. In context, which of the following is the best way to revise and combine sentences 6 and 7 (reproduced below) ?
- Computers can analyze fingerprints, looking for points of similarity in the fingerprints’ distinctive patterns. Computers cannot conclusively match any two prints.*
- (A) They could analyze fingerprints, looking for points of similarity in the distinctive patterns of the prints, but they could not conclusively match any two prints.
  - (B) Furthermore, computers could analyze fingerprints by looking for points of similarity in the distinctive patterns of the two fingerprints and still fail to match any two of them conclusively.
  - (C) Although computers can analyze fingerprints, looking for points of similarity in the distinctive patterns of the prints, they cannot match any two prints conclusively.
  - (D) But, in fact, since computers will analyze fingerprints by looking for points of similarity in their distinctive patterns, they cannot match any two prints conclusively.
  - (E) Therefore, they are able to analyze fingerprints by looking for points of similarity in their distinctive patterns but cannot conclusively match any two.

33. In context, which of the following is the best way to revise sentence 10 (reproduced below) at the underlined portion?

*A program designed to search for a large number of similarities may not come up with any matches.*

- (A) On the other hand, a program designed to look for a large number of similarities
  - (B) A program designed to search for a large number of similarities, for example,
  - (C) In addition, a program designed to do so
  - (D) A program designed to search for a large number of them, in fact,
  - (E) Even so, a program designed to do that
34. In context, where would be the best place to insert the following sentence?
- Computers also do not make the final decisions.*
- (A) Immediately before sentence 2
  - (B) Immediately before sentence 3
  - (C) Immediately before sentence 11
  - (D) Immediately before sentence 12
  - (E) Immediately before sentence 13

35. In context, which of the following sentences would most appropriately be placed immediately after sentence 14 ?

- (A) Many fingerprint analysts who take this training already have backgrounds in science, though.
- (B) Of course, humans are not the only ones who have fingerprints; all primates do.
- (C) Fingerprint identification is not used only in criminal investigations, however; it also has civil applications in business and education.
- (D) But even experts sometimes disagree, a tendency that shows that fingerprint identification is more subjective than many people realize.
- (E) Yet the training in other fields of forensic science may be just as rigorous as the training these experts receive.

**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.

**SECTION 7**  
Time — 25 minutes  
18 Questions

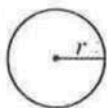
**Turn to Section 7 (page 6) of your answer sheet to answer the questions in this section.**

**Directions:** This section contains two types of questions. You have 25 minutes to complete both types. For questions 1-8, solve each problem and decide which is the best of the choices given. Fill in the corresponding circle on the answer sheet. You may use any available space for scratch work.

Notes

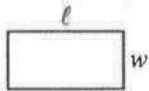
1. The use of a calculator is permitted.
2. All numbers used are real numbers.
3. Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
4. Unless otherwise specified, the domain of any function  $f$  is assumed to be the set of all real numbers  $x$  for which  $f(x)$  is a real number.

Reference Information

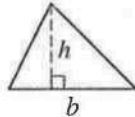


$$A = \pi r^2$$

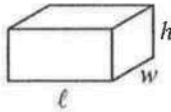
$$C = 2\pi r$$



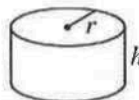
$$A = \ell w$$



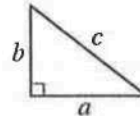
$$A = \frac{1}{2}bh$$



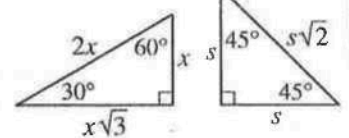
$$V = \ell wh$$



$$V = \pi r^2 h$$



$$c^2 = a^2 + b^2$$



Special Right Triangles

The number of degrees of arc in a circle is 360.

The sum of the measures in degrees of the angles of a triangle is 180.

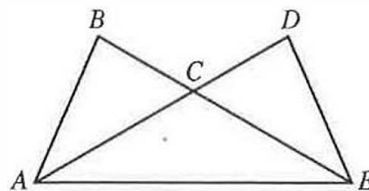
1. Which of the following is NOT a factor of both 60 and 80 ?
  - (A) 2
  - (B) 3
  - (C) 4
  - (D) 5
  - (E) 10

2. In the  $xy$ -plane, the endpoints of a line segment are  $P(0, -2)$  and  $Q(0, -8)$ . What is the length of  $\overline{PQ}$  ?
  - (A) 4
  - (B) 6
  - (C) 10
  - (D) 12
  - (E) 16

**GO ON TO THE NEXT PAGE**

3. If  $6x + 2 = 4k$ , what is  $3x + 1$  in terms of  $k$ ?

- (A)  $k - 2$
- (B)  $k$
- (C)  $k + 2$
- (D)  $2k - 2$
- (E)  $2k$



Note: Figure not drawn to scale.

5. In the figure above,  $AD = AE = BE$  and  $AB = DE$ . If  $AE = 24$  and  $CD = 11$ , what is the perimeter of  $\triangle ACE$ ?

- (A) 46
- (B) 50
- (C) 59
- (D) 60
- (E) 61

7, 11, 15, 19, ...

4. In the sequence above, the first term is 7, and each term after the first is 4 more than the preceding term. What is the result when the 45th term is subtracted from the 50th term?

- (A) 5
- (B) 16
- (C) 20
- (D) 23
- (E) 24

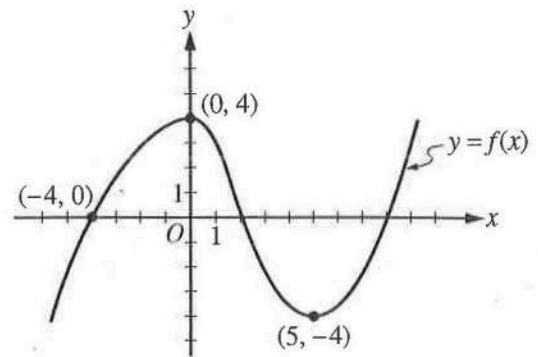
6. If the average (arithmetic mean) of  $x$ ,  $y$ , and  $z$  is  $y$ , what is  $x + z$  in terms of  $y$ ?

- (A)  $2y$
- (B)  $\frac{3}{2}y$
- (C)  $y$
- (D)  $\frac{y}{2}$
- (E)  $\frac{y}{3}$

GO ON TO THE NEXT PAGE 

7. Esther's mother earned \$8 more than 3 times the amount Esther earned during the summer. If Esther's mother earned  $m$  dollars, which of the following represents the amount, in dollars, that Esther earned during the summer?

- (A)  $\frac{m-8}{3}$   
(B)  $\frac{m+8}{3}$   
(C)  $\frac{3m}{8}$   
(D)  $3(m-8)$   
(E)  $3m+8$



8. The graph of the function  $f$  is shown above. The function  $g$  (not shown) is defined by the equation  $g(x) = f(x) + 4$ . For which of the following values of  $x$  is  $g(x) = 0$ ?
- (A) 0  
(B) 2  
(C) 4  
(D) 5  
(E) 8

**Directions:** For Student-Produced Response questions 9-18, use the grids at the bottom of the answer sheet page on which you have answered questions 1-8.

Each of the remaining 10 questions requires you to solve the problem and enter your answer by marking the circles in the special grid, as shown in the examples below. You may use any available space for scratch work.

Answer:  $\frac{7}{12}$

Write answer in boxes. →

7	/	1	2
○	○	○	○
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

← Fraction line

Grid in result. →

Answer: 2.5

2	.	5
○	○	○
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

← Decimal point

Answer: 201

Either position is correct.

2	0	1
○	○	○
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4

2	0	1
○	○	○
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4

**Note:** You may start your answers in any column, space permitting. Columns not needed should be left blank.

- Mark no more than one circle in any column.
- Because the answer sheet will be machine-scored, you will receive credit only if the circles are filled in correctly.
- Although not required, it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- No question has a negative answer.
- **Mixed numbers** such as  $3\frac{1}{2}$  must be gridded as 3.5 or  $7/2$ . (If  $\frac{31}{10}$  is gridded, it will be interpreted as  $\frac{31}{2}$ , not  $3\frac{1}{2}$ .)

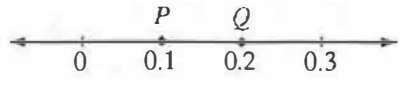
- **Decimal Answers:** If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid. For example, if you obtain an answer such as 0.6666..., you should record your result as .666 or .667. A less accurate value such as .66 or .67 will be scored as incorrect.

Acceptable ways to grid  $\frac{2}{3}$  are:

2	/	3
○	○	○
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

.	6	6	6
○	○	○	○
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6

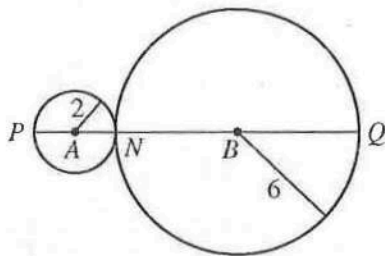
.	6	6	7
○	○	○	○
0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6



9. On the number line above, point R (not shown) is the midpoint of segment  $\overline{PQ}$ . What is the coordinate of point R?

10. In a parking lot, the number of trucks is half of the number of cars. If there is a total of 24 trucks and cars in the parking lot, how many trucks are there?

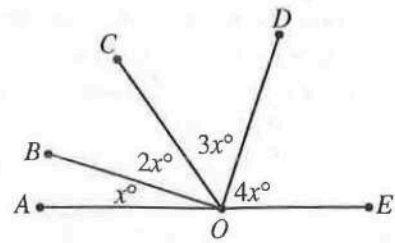




11. In the figure above, the two circles have centers  $A$  and  $B$  and are tangent at point  $N$ . What is the length of segment  $\overline{AQ}$ ?

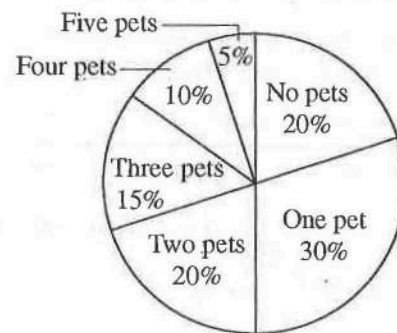
$$A(x) = 100x - 2x^2$$

12. A rectangular animal pen is to be made against a wall with 100 feet of fencing. The area, in square feet, of the animal pen is modeled by the function  $A$  above, where  $x$  is the width, in feet, of the pen. What is the area, in square feet, of a pen that has a width of 7 feet?

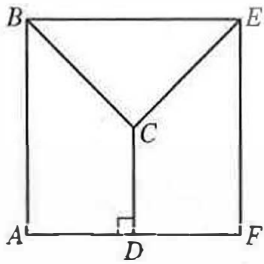


13. In the figure above, point  $O$  lies on  $\overline{AE}$ . What is the degree measure of  $\angle COE$ ? (Disregard the degree symbol when gridding your answer.)

PETS PER HOUSEHOLD



14. The circle graph above shows the percents of 20 households that have particular numbers of pets. For example, 15 percent of the households each have 3 pets. What is the total number of pets in the 20 households?



15. In the figure above,  $C$  is the center of square  $ABEF$ . If  $EF = 10$ , what is the area of polygon  $ABCD$ ?

$$w = \frac{5}{2}z$$

$$z = 2x + 4y$$

$$x = \frac{1}{2}y$$

16. In the system of equations above,  $x \neq 0$ . What is the value of  $\frac{w}{x}$ ?

Number of Tickets	Price per Ticket
500	\$30
600	\$25
750	\$20
1000	\$15
$x$	\$12

17. A promoter of an event must decide on a single price for all tickets for the event. The incomplete table above indicates some alternative prices and the minimum number of tickets to be sold at those prices to cover the cost of the event. The number of tickets to be sold is inversely proportional to the price per ticket. What is the value of  $x$ ?

18. If  $a$ ,  $b$ , and  $c$  are positive integers and, for all values of  $x$ ,  $ax + b(x + c) = 17x + 52$ , what is one possible value of  $a$ ?

**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.



## SECTION 8

Time — 20 minutes

19 Questions

Turn to Section 8 (page 7) 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. Because of its beautiful photographs and clear text, the new book on Pueblo cliff villages will be ----- not only for specialists but for ----- readers as well.
  - (A) accessible . . general
  - (B) uninteresting . . scholarly
  - (C) confusing . . critical
  - (D) unmarketable . . casual
  - (E) available . . trained
2. Unlike most business historians, Smith is neither a defender nor an opponent of the companies she writes about; such objectivity is exceedingly ----- in this highly ----- field.
  - (A) rare . . combative
  - (B) common . . divisive
  - (C) predictable . . complacent
  - (D) surprising . . cooperative
  - (E) typical . . cordial
3. A trial transcript is a ----- record of courtroom testimony, useful whenever a witness's exact words must be repeated.
  - (A) verbatim (B) subjective (C) spurious
  - (D) marginal (E) vigorous
4. The many factors affecting a species' abundance seldom act in -----; on the contrary, interactions between factors are commonplace.
  - (A) haste (B) principle (C) place
  - (D) isolation (E) miniature
5. Her prose is ----- in all ways but one: it is often given to a ----- of descriptive detail that threatens to overwhelm every cogent observation.
  - (A) minimalist . . paucity
  - (B) immutable . . fulsomeness
  - (C) irksome . . felicity
  - (D) tenacious . . vacillation
  - (E) exemplary . . superfluity
6. Derek's ----- nature worried his friends, who thought such fearlessness would one day lead him into danger.
  - (A) callous (B) intrepid (C) circumspect
  - (D) disingenuous (E) mercurial



The two passages below are followed by questions based on their content and on the relationship between the two 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 7-19 are based on the following passages.

These passages discuss the reliability of the ancient Greek historian Herodotus (c. 484-425 B.C.E.).

### Passage 1

Herodotus himself does not expect us to believe everything we read. For him the word *historiē* meant “research” or “investigation, enquiry,” and he often emphasizes that what he gives us is provisional information, the best that he has been able in his researches to discover. He sometimes interrupts the ongoing account in his first-person voice as the narrator, precisely to remind us not to treat the ongoing narrative as definitively true. In discussing the thorny issue of whether the Argives went over to the Persian side in the Persian Wars, he adds: “I am obliged to record the things I am told, but I am certainly not required to believe them—this remark may be taken to apply to the whole of my account.”

In one way this makes Herodotus’ *Histories* a profoundly historical text. Where later narrative historians like Thucydides, Tacitus, Gibbon, or the Durants broke down their informants’ reports into data, and from that data constructed their own authoritative version of events, Herodotus takes a different approach. What he claims, at least, to give us is in each case the best version or versions of past events and the distant reaches of the present that he has been able to hear, taken from the most qualified informants he could find. Thus he narrates, for instance, the most credible of the many versions available to him of Cyrus’ death. He strings these stories together to form the ongoing narrative of his *Histories*. Clearly the initial selection of stories, the pacing, the structuring, and much in the literary presentation reveal Herodotus’ own interests, values, and gifts as a narrator; he insists, however, that the contents of the stories are not his, but have been gathered from others.

The phrases “it is said” or “they say” occur hundreds of times in the narrative, as Herodotus reminds us that he owes his stories to others who have told them to him. He names a handful of his informants. Some, especially priests at temple sites, he identifies without naming; several hundred times he cites unnamed speakers by their cities: Spartans, Corinthians, Athenians; and non-Greek interlocutors from farther off as well: Egyptians of course, but also Arabians, Ethiopians, and many others. On his extensive travels Herodotus talked with a wide variety of people; in most instances we can only guess where he spoke to them, what problems he might have had in communicating cross-culturally or through an interpreter, and how accurately he remembered or transcribed what they told him. What he repeatedly emphasizes is that his

stories contain real information, but he remains aware, and wants us to be aware too, of the fact that as data they are only as good as the quality of his sources allows.

### Passage 2

Scholars skeptical of Herodotus emphasize that as modern readers we must remain aware of the vast gulf that separates our own sense of what it means to preserve the past from those that prevailed in the mid-fifth century B.C.E. Modern students of oral history, drawing on the comparative study of other oral cultures, claim that three generations is the outside limit to be placed on the accurate oral transmission of past events; judged by this standard, much of the information included in the first four books of the *Histories* would not be considered historical. In assessing ancient traditional stories, moreover, two particular sources of error must also be kept in mind, apart from the accidental distortions created by the passage of time: first (something Herodotus himself was acutely aware of), stories preserved orally from the past are by definition particular and tendentious in nature—the people who remembered and told them have always told them from their own (limited) funds of information, and for their own reasons; second, ancient social memory habitually supplied highly personal motives as explanations for events that modern historians would consider largely the product of impersonal economic or social forces.

Our dependence on Herodotus for archaic Greek history lends a particular urgency to a second set of issues involving Herodotus’ own credibility as a historian. Some scholars have scrutinized the text of the *Histories* and have come to the conclusion not merely that it is unhistorical, but that it was intended by Herodotus to mislead us by persuading us through its rhetoric to read it as history. Detlev Fehling in particular argues that Herodotus’ use of source citations is simply too good to be true. According to Fehling, sources cited in the *Histories* always improbably support a partisan version of events put forward by their own city; moreover, Herodotus more than once claims two or more widely removed and thus apparently independent sources for obviously fictive “information”; both the systematic tidiness and the harmonious meshing of (invented) information show us that the informants themselves have been invented by the author. According to this view, Herodotus is not at all a historian, or someone with any respect for data, but on the contrary a gifted narrator who has virtually made up the whole of what he recounts.

*Herodotus: The Histories* translated by Waterfield (1998). Circa 1600w from pp. xxvii-xxxiii. By permission of Oxford University Press.



7. Both passages mention Herodotus' strength as
- a storyteller
  - an interviewer
  - a negotiator
  - a theorist
  - an explorer
8. Both passages indicate that Herodotus believed that some of his sources
- deliberately attempted to mislead him
  - should not be regarded as totally trustworthy
  - were probably less reliable than those used by other historians
  - contradicted themselves without realizing it
  - pretended to witness events that they could not have seen
9. In line 8, "treat" most nearly means
- regard
  - remedy
  - debate
  - pay for
  - comment on
10. The quote from Herodotus in lines 10-13 primarily serves to
- demonstrate a consensus
  - supply a counterexample
  - explain an exception
  - illustrate a claim
  - define a term
11. The reference to Herodotus' account of Cyrus' death (lines 23-25) serves to illustrate
- Herodotus' excessive faith in his sources
  - Herodotus' affinity for entertaining stories
  - a method Herodotus claimed to employ
  - an advantage Herodotus saw in his approach
  - an account Herodotus seems to have invented
12. Lines 42-46 ("in most . . . told him") primarily serve to
- emphasize uncertainties about Herodotus' gathering of information
  - justify the skeptical attitude some scholars take toward Herodotus' work
  - explain why Herodotus was dubious about some of his sources' claims
  - advance the idea that Herodotus may have invented some of his information
  - refute the suggestion that Herodotus did not actually interview anyone
13. In line 56, "outside" most nearly means
- extraneous
  - negligible
  - maximum
  - superficial
  - secluded
14. The conclusion about the *Histories* proposed in lines 58-59 ("much . . . historical") depends on which of the following assumptions about people in the "other oral cultures" (line 55) ?
- They have more ways to transmit information over time than people did in Herodotus' era.
  - They have higher standards for accurately transmitting oral information than people did in Herodotus' era.
  - They can accurately transmit a greater amount of oral information over time than could people in Herodotus' era.
  - The accuracy with which they transmit oral information over time is less than the accuracy was for people in Herodotus' era.
  - The length of time over which they can accurately transmit oral information is representative of what people could do in Herodotus' era.
15. Lines 72-74 ("Our . . . historian") suggest that the "second set of issues" is particularly important because
- some of Herodotus' claims contradict archaeological evidence
  - Herodotus clearly intended to mislead future historians
  - Herodotus' method is widely used by historians
  - Herodotus has been unfairly maligned
  - historians rely heavily on Herodotus
16. The "scholars" cited in line 75, Passage 2, would most likely describe the view of Herodotus put forward in Passage 1 as
- deservedly influential
  - excessively sentimental
  - overly credulous
  - unnecessarily pedantic
  - refreshingly candid



17. Both Passage 1 and Detlev Fehling (line 79, Passage 2) address the issue of Herodotus' reliability by analyzing Herodotus'
- (A) falsification of data
  - (B) sequencing of events
  - (C) use of sources
  - (D) theoretical arguments
  - (E) autobiographical comments
18. Detlev Fehling (line 79, Passage 2) would most likely speculate that the "unnamed speakers" mentioned in line 37, Passage 1, were
- (A) misunderstood by Herodotus
  - (B) fabricated by Herodotus
  - (C) underused by Herodotus
  - (D) biased in favor of Greece
  - (E) biased in favor of Persia
19. Lines 83-88 ("moreover . . . author") suggest that in an authentic work of history, it is reasonable to expect that
- (A) trusted sources will occasionally be found to have misrepresented some facts
  - (B) obviously fictive information will be shared by many sources
  - (C) partisan versions of events will be put forward by most sources
  - (D) independent sources will sometimes disagree with one another
  - (E) empirical data will sometimes conflict with reports from human sources

**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.



## SECTION 9

Time — 20 minutes

16 Questions

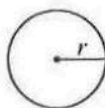
Turn to Section 9 (page 7) of your answer sheet to answer the questions in this section.

**Directions:** For this section, solve each problem and decide which is the best of the choices given. Fill in the corresponding circle on the answer sheet. You may use any available space for scratch work.

Notes

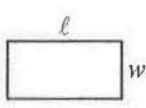
- The use of a calculator is permitted.
- All numbers used are real numbers.
- Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
- Unless otherwise specified, the domain of any function  $f$  is assumed to be the set of all real numbers  $x$  for which  $f(x)$  is a real number.

Reference Information

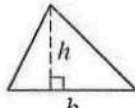


$$A = \pi r^2$$

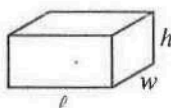
$$C = 2\pi r$$



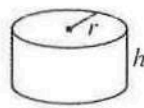
$$A = \ell w$$



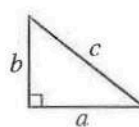
$$A = \frac{1}{2}bh$$



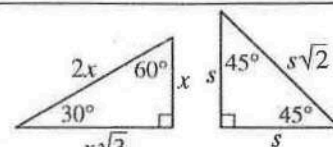
$$V = \ell wh$$



$$V = \pi r^2 h$$



$$c^2 = a^2 + b^2$$



Special Right Triangles

The number of degrees of arc in a circle is 360.

The sum of the measures in degrees of the angles of a triangle is 180.

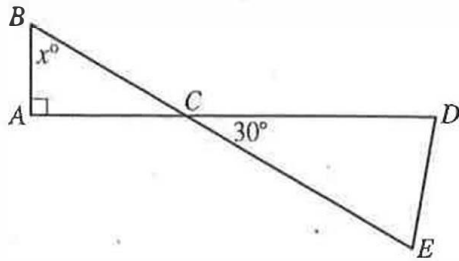
1. If
- $8x = 5y$
- , then
- $8x - 5y =$

- (A) 0
- (B)  $\frac{5}{8}$
- (C)  $\frac{8}{5}$
- (D) 5
- (E) 8

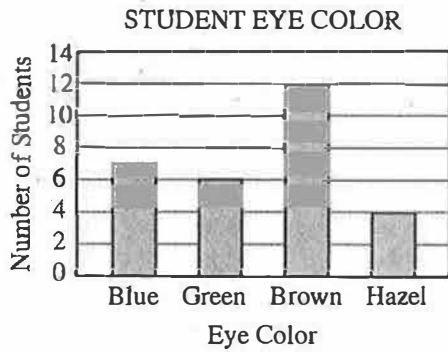
2. A sponsor of one person walking in a charity walkathon will donate \$7.00 plus an additional \$0.25 for each mile the person walks. Which of the following functions,
- $d$
- , models the total amount, in dollars, that the sponsor will donate to the charity when the person walks
- $m$
- miles?

- (A)  $d(m) = 7.00 + m$
- (B)  $d(m) = 7.00 + 0.25m$
- (C)  $d(m) = 7.00m + 0.25$
- (D)  $d(m) = 7.25 + m$
- (E)  $d(m) = 7.25m$

GO ON TO THE NEXT PAGE



3. In the figure above, point  $C$  is on segments  $\overline{AD}$  and  $\overline{BE}$ . What is the value of  $x$ ?
- (A) 30  
(B) 40  
(C) 50  
(D) 60  
(E) 70



4. The bar graph above shows the eye color of 29 students in a math class. What fraction of the students do not have blue eyes?
- (A)  $\frac{4}{29}$   
(B)  $\frac{7}{29}$   
(C)  $\frac{10}{29}$   
(D)  $\frac{15}{29}$   
(E)  $\frac{22}{29}$

5. The sum of  $n$  and 5 is equal to 2. What number is equal to  $n$  minus 4?
- (A)  $-7$   
(B)  $-3$   
(C)  $-1$   
(D)  $3$   
(E)  $7$





6. If  $x < y < 0$ , which of the following is true?

- (A)  $x + y < 0$
- (B)  $x + y = 0$
- (C)  $x + y > 0$
- (D)  $xy = 0$
- (E)  $xy < 0$

7. Jinghua hiked  $4\frac{1}{2}$  miles through the woods in  $2\frac{1}{4}$  hours. She hiked the return trip at the same average rate but by a different route, taking  $2\frac{1}{2}$  hours.

How many miles did Jinghua hike on the return trip?

- (A)  $4\frac{3}{4}$
- (B) 5
- (C)  $5\frac{1}{2}$
- (D) 6
- (E)  $6\frac{1}{4}$

$x$	$f(x)$	$g(x)$
-5	3	7
-1	6	8
0	1	3
2	-5	-1
3	4	2

8. Some values of the functions  $f$  and  $g$  are shown in the table above. For which of the values of  $x$  in the table does  $f(x) = g(x) + 2x$ ?

- (A) -5
- (B) -1
- (C) 0
- (D) 2
- (E) 3



9. A small-bird habitat at a zoo contains only finches and parakeets. The ratio of the number of parakeets to the number of finches is 5 to 2. One of the birds in the habitat is to be selected at random. What is the probability that the bird selected will be a finch?

- (A)  $\frac{2}{7}$   
(B)  $\frac{2}{5}$   
(C)  $\frac{5}{7}$   
(D)  $\frac{7}{5}$   
(E)  $\frac{5}{2}$

10. The vertices of a rectangle are consecutively labeled  $A$ ,  $B$ ,  $C$ , and  $D$  in a clockwise direction. Which of the following must be true?

- (A)  $AB > BC$   
(B)  $AB > AC$   
(C)  $AC > AD$   
(D)  $BC > AC$   
(E)  $BC > CD$

11. For all numbers  $x$  and  $y$ , let  $x \odot y$  be defined by

$x \odot y = |x^2 - y^2| + 2$ . What is the smallest possible value of  $x \odot y$ ?

- (A) 0  
(B) 1  
(C) 2  
(D) 3  
(E) 4

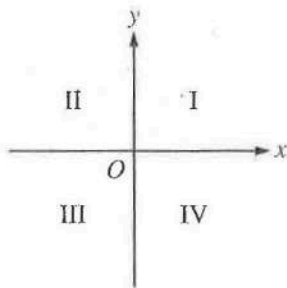


12. For how many positive two-digit integers is the tens digit less than the ones digit?

(A) 36  
(B) 38  
(C) 40  
(D) 42  
(E) 50

14. Pink paint is made by mixing 5 parts white paint with 1 part red paint. If Joseph uses this method for making pink paint and he has 3 gallons of white paint and 1 gallon of red, what is the maximum amount of pink paint that Joseph can make?

(A)  $3\frac{2}{5}$  gallons  
(B)  $3\frac{1}{2}$  gallons  
(C)  $3\frac{2}{3}$  gallons  
(D)  $3\frac{3}{5}$  gallons  
(E) 4 gallons



13. In the  $xy$ -coordinate plane above, line  $\ell$  (not shown) contains the point  $(0, -2)$ . Each of the other points on line  $\ell$  lies in either quadrant III or quadrant IV. What is the slope of line  $\ell$ ?

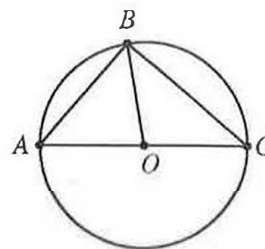
(A)  $-2$   
(B)  $-1$   
(C)  $0$   
(D)  $1$   
(E) The slope is undefined.



15. If  $y = x^2$ , where  $x \neq 0$ , and  $z = y^5$ , what does  $\frac{z}{y}$

equal in terms of  $x$ ?

- (A)  $x^3$
- (B)  $x^5$
- (C)  $x^6$
- (D)  $x^7$
- (E)  $x^8$



Note: Figure not drawn to scale.

16. In the figure above,  $\triangle ABC$  is inscribed in the circle, which has center  $O$ . If  $AB = AO$ , what is the measure of  $\angle BCA$ ?

- (A)  $25^\circ$
- (B)  $30^\circ$
- (C)  $45^\circ$
- (D)  $50^\circ$
- (E)  $60^\circ$

**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.


**SECTION 10**

Time — 10 minutes

14 Questions

Turn to Section 10 (page 7) 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.

The following sentences test correctness and effectiveness of expression. Part of each sentence or the entire sentence is underlined; beneath each sentence are five ways of phrasing the underlined material. Choice A repeats the original phrasing; the other four choices are different. If you think the original phrasing produces a better sentence than any of the alternatives, select choice A; if not, select one of the other choices.

In making your selection, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, sentence construction, and punctuation. Your selection should result in the most effective sentence—clear and precise, without awkwardness or ambiguity.

**EXAMPLE:**

Laura Ingalls Wilder published her first book and she was sixty-five years old then.

- (A) and she was sixty-five years old then
- (B) when she was sixty-five
- (C) at age sixty-five years old
- (D) upon the reaching of sixty-five years
- (E) at the time when she was sixty-five

(A) ● (C) (D) (E)

1. When reading a poem, you should read slowly to have given oneself the opportunity to savor the details of its language, form, and sound.

- (A) to have given oneself
- (B) to give yourself
- (C) for oneself to be given
- (D) for oneself to have
- (E) so that you had had

2. The economist estimated that workers in our city spend an average of 40 minutes daily traveling to their jobs and 50 minutes returning home.

- (A) workers in our city spend
- (B) a worker in our city who spends
- (C) they who work in our city spends
- (D) those who work in our city spending
- (E) our city's workers having spent

3. Neuroscientists have gained new insights into how the brain works by adopting research methods used to study other elaborate systems, this ranges from computer chips to the stock market.

- (A) systems, this ranges from computer chips to
- (B) systems with a range from computer chips and
- (C) systems ranging from computer chips to
- (D) systems, it ranges over computer chips and
- (E) systems, they are ranging from computer chips to

4. Most of the objects in the museum's ceramics collection are porcelain pieces from Germany, although the collection also includes pieces from Turkey, Korea, and Japanese ceramics are also represented.

- (A) and Japanese ceramics are also represented
- (B) as well as Japanese ceramics
- (C) and from Japan
- (D) and Japan
- (E) and also from Japan



5. Most states in the United States had enacted child labor laws by 1920, but not until 1938 when the Fair Labor Standards Act established a national minimum working age.
- (A) but not until 1938 when  
(B) but it was not until 1938 that  
(C) not until 1938 did  
(D) it was, however, not until 1938 that  
(E) and not until 1938 when
6. The largest hot desert in the world, the Sahara covers well over three million square miles, and eleven countries are spanned by it.
- (A) miles, and eleven countries are spanned by it  
(B) miles and spanning eleven countries  
(C) miles and spans eleven countries  
(D) miles, it spans eleven countries  
(E) miles, with eleven countries spanned by it
7. Adopted in 1997, the Kyoto Protocol is what was the international agreement to reduce the greenhouse gas emissions of industrialized nations over a five-year period.
- (A) is what was the international agreement  
(B) was when it was internationally agreed  
(C) was where the international agreement was  
(D) being internationally agreed  
(E) is the international agreement
8. During the 1990s, the number of factory outlet malls greatly increased in the United States, at which brand-name goods are sold at discount prices.
- (A) During the 1990s, the number of factory outlet malls greatly increased in the United States, at which brand-name goods are sold at discount prices.  
(B) Factory outlet malls in the United States greatly increased in number during the 1990s, at which brand-name goods are sold at discount prices.  
(C) Greatly increasing during the 1990s were the number of factory outlet malls in the United States, at which brand-name goods are sold at discount prices.  
(D) The number of factory outlet malls, at which brand-name goods are sold at discount prices, greatly increased in the United States during the 1990s.  
(E) In the United States, the number of factory outlet malls greatly increased during the 1990s, at which brand-name goods are sold at discount prices.
9. With an average depth of about 12,000 feet, the extremes of darkness, high pressure, and cold that characterize the deep sea could not be tolerated by shallow-water animals.
- (A) extremes of darkness, high pressure, and cold that characterize the deep sea  
(B) extremes of darkness, high pressure, and cold characterizing the deep sea  
(C) extremes of darkness, high pressure, and cold that are characteristic of the deep sea  
(D) deep sea is characterized by extremes of darkness, high pressure, and of being so cold that it  
(E) deep sea is characterized by extremes of darkness, high pressure, and cold that
10. Scientists investigating the effects of exercise compared the performance of active mice with sedentary mice on a memory test and found that the active mice did better.
- (A) the performance of active mice with sedentary mice on a memory test and found  
(B) the performance on a memory test of active mice with sedentary mice and it was found  
(C) the performances of active and sedentary mice on a memory test and found  
(D) how active and sedentary mice performed on a memory test, their finding was  
(E) active and sedentary mice on how they performed on a memory test, they found
11. The Dracula orchids, aptly named because their modified leaves resemble flying bats, have central petals that look like small white mushrooms.
- (A) aptly named because their  
(B) aptly named because of their  
(C) aptly named because of having  
(D) named that because they have  
(E) named that because of their
12. Hailed as a remarkable technological advance, Hany Farid developed the software that measures the extent to which images in the media have been digitally altered.
- (A) Hany Farid developed the software that  
(B) Hany Farid has developed the software that  
(C) the software developed by Hany Farid  
(D) the software, Hany Farid developed it,  
(E) it was the software developed by Hany Farid that



13. As a delegate to the United Nations General Assembly in 1946, Eleanor Roosevelt and Andrey Vyshinsky debated the importance of free speech.
- (A) Eleanor Roosevelt and Andrey Vyshinsky debated
  - (B) Eleanor Roosevelt and Andrey Vyshinsky debated over
  - (C) Eleanor Roosevelt and Andrey Vyshinsky, they debated
  - (D) Eleanor Roosevelt debated Andrey Vyshinsky over
  - (E) Eleanor Roosevelt, who debated Andrey Vyshinsky over
14. Some scientists believe that the species known as White's tree frog is able to control the amount of water that is evaporated through their skin, enabling them to control their body temperature.
- (A) their skin, enabling them to control their body temperature
  - (B) their skin, which enables them to control their body temperature
  - (C) its skin, this enables it to control its body temperature
  - (D) its skin and that its body temperature being controlled in this way
  - (E) its skin and thus can control its body temperature

**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.