Reading Test

65 MINUTES, 52 QUESTIONS

Turn to Section 1 of your answer sheet to answer the questions in this section.

DIRECTIONS

Each passage or pair of passages below is followed by a number of questions. After reading each passage or pair, choose the best answer to each question based on what is stated or implied in the passage or passages and in any accompanying graphics (such as a table or graph).

Questions 1-10 are based on the following passage.

This passage is adapted from Philip Roth, *American Pastoral*. ©1997 by Philip Roth. "The Swede" was the nickname of Seymour Levov, a talented athlete from the narrator's hometown.

One night in the summer of 1985, while visiting
New York, I went out to see the Mets play the Astros,
and while circling the stadium with my friends,
Line looking for the gate to our seats, I saw the Swede,
5 thirty-six years older than when I'd watched him play
baseball for Upsala. He wore a white shirt, a striped
tie, and a charcoal-gray summer suit, and he was still
terrifically handsome. The golden hair was a shade or
two darker but not any thinner; no longer was it cut
10 short but fell rather fully over his ears and down to
his collar. In this suit that fit him so exquisitely he
seemed even taller and leaner than I remembered
him in the uniform of one sport or another. The
woman with us noticed him first. "*Who* is that?
15 That's—that's . . . Is that Mayor Lindsay?" she asked.
"No," I said. "My God. You know who that is? It's
Swede Levov." I told my friends, "that's the Swede!"
A skinny, fair-haired boy of about seven or eight
was walking alongside the Swede, a kid under a Mets
20 cap pounding away at a first basemen's mitt that
dangled, as had the Swede's, from his left hand.
The two, clearly a father and his son, were laughing
about something together when I approached and
introduced myself. "I knew your brother at
25 Weequahic."

"You're Zuckerman?" he replied, vigorously
shaking my hand. "The author?"
"I'm Zuckerman the author."
"Sure, you were Jerry's great pal."
30 "I don't think Jerry had great pals. He was too
brilliant for pals. He just used to beat my pants off at
Ping-Pong down in your basement. Beating me at
Ping-Pong was very important to Jerry."
"So you're the guy. My mother says, 'And he
35 was such a nice, quiet child when he came to the
house.' You know who this is?" the Swede said
to the boy. "The guy who wrote those books.
Nathan Zuckerman."
Mystified, the boy shrugged and muttered, "Hi."
40 "This is my son Chris."
"These are friends," I said, sweeping an arm out to
introduce the three people with me. "And this man,"
I said to them, "is the greatest athlete in the history of
Weequahic High. A real artist in three sports. Played
45 first base like Hernandez[1]—thinking. A line-drive
doubles hitter. Do you know that?" I said to his son.
"Your dad was our Hernandez."
"Hernandez is left-handed," he replied.
"Well, that's the only difference," I said to the
50 little literalist, and put out my hand again to his
father. "Nice to see you, Swede."
"You bet. Take it easy, Skip."
"Remember me to your brother," I said.
He laughed, we parted, and someone was saying
55 to me, "Well, well, the greatest athlete in the history
of Weequahic High called you 'Skip.'"

"I know. I can't believe it." And I did feel almost as wonderfully singled out as I had the one time before, at the age of ten, when the Swede had got so
60 personal as to recognize me by the playground nickname I'd acquired because of two grades I skipped in grade school.

Midway through the first inning, the woman with us turned to me and said, "You should have seen
65 your face—you might as well have told us he was Zeus.[2] I saw just what you looked like as a boy."

[1] First baseman for the New York Mets in the mid-1980s

[2] In Greek mythology, the ruler of the gods

1

The main purpose of the passage is to

A) show how an event forced the narrator to reevaluate his perspective on his childhood.

B) analyze how past experiences shaped the narrator's and another character's future.

C) reflect upon the changes that people go through as they give up on their childhood dreams.

D) describe an accidental meeting that reveals the narrator's relationship with a character.

2

A main theme of the passage is that

A) friends who get back in touch after many years often find that everything has changed.

B) encountering a memorable person from the past can make an adult feel like a child again.

C) playing sports together is an experience that connects people for the rest of their lives.

D) older people tend to remember the past as being better than it really was.

3

As used in line 11, "exquisitely" most nearly means

A) skillfully.

B) perfectly.

C) primly.

D) formally.

4

Which choice best supports the conclusion that Chris, the Swede's son, reminds the narrator of the Swede?

A) Lines 18-21 ("A skinny . . . hand")

B) Lines 46-47 ("Do you . . . Hernandez")

C) Line 48 ("Hernandez . . . replied")

D) Lines 49-51 ("Well . . . father")

5

A meaningful irony in the passage is that, while the narrator had admired the young Swede's accomplishments, the Swede

A) had trained his son to follow in his footsteps.

B) appreciated the narrator's accomplishments as an adult.

C) had failed to achieve his promise as the years went by.

D) envied the achievements of his more scholarly classmates.

6

Which choice provides the best evidence for the answer to the previous question?

A) Lines 22-24 ("The two . . . myself")

B) Lines 34-38 ("So you're . . . Zuckerman")

C) Line 52 ("You bet . . . Skip")

D) Lines 54-56 ("He laughed . . . Skip")

7

Chris, the Swede's son, responds to the narrator's comparison of his father to another baseball player by

A) comparing his father to a different player.

B) revealing his admiration for his father.

C) pointing out a problem with the comparison.

D) showing his gratitude to the narrator.

8

When someone repeats the narrator's phrase "the greatest athlete in the history of Weequahic High" (lines 55-56), the main effect is to

A) admit that the narrator was right about the Swede.

B) show appreciation for the Swede's accomplishments.

C) tease the narrator for his enthusiasm in meeting the Swede.

D) help the narrator remember an incident involving the Swede.

9

Based on the passage, the reason the narrator was amazed that the Swede had called him "Skip" was most probably that the narrator

A) thought adults should refer to each other by their formal names.

B) still felt lucky to receive personal attention from the Swede.

C) had not been called "Skip" since he was ten.

D) was not aware that the Swede had ever known his nickname.

10

The reference to "Zeus" in line 66 mainly serves to

A) emphasize that the narrator held the Swede in high regard.

B) show that the Swede intimidated those around him.

C) suggest that the narrator was surprised that the Swede had recognized him.

D) indicate the narrator's shock at seeing a man from his past.

Writing and Language Test

35 MINUTES, 44 QUESTIONS

Turn to Section 2 of your answer sheet to answer the questions in this section.

DIRECTIONS

Each passage below is accompanied by a number of questions. For some questions, you will consider how the passage might be revised to improve the expression of ideas. For other questions, you will consider how the passage might be edited to correct errors in sentence structure, usage, or punctuation. A passage or a question may be accompanied by one or more graphics (such as a table or graph) that you will consider as you make revising and editing decisions.

Some questions will direct you to an underlined portion of a passage. Other questions will direct you to a location in a passage or ask you to think about the passage as a whole.

After reading each passage, choose the answer to each question that most effectively improves the quality of writing in the passage or that makes the passage conform to the conventions of standard written English. Many questions include a "NO CHANGE" option. Choose that option if you think the best choice is to leave the relevant portion of the passage as it is.

Questions 1-10 **are based on the following passage and supplementary material.**

New National Parks

Under the Antiquities Act of 1906, the Organic Act of 1916, and other federal laws, the US government has the power to take custody of land **1** when having historical significance or great natural beauty. The designation of a territory as a national park, national monument, or other **2** types of protected area can limit activities such as oil drilling and logging and provide funding for staff to work on preservation, maintenance, and visitor assistance. Federally protected lands are

1

A) NO CHANGE
B) for its having
C) that has
D) for it has

2

A) NO CHANGE
B) type of protected area
C) type of protected areas
D) protected area types

extremely popular, **3** with 270 million visitors each year to national parks alone, but in recent years critics have complained that these public lands are a burden on the federal budget that limits economic development. In fact, however, maintaining and expanding the land under public protection would be an economic benefit to many parts of the United States.

Some commentators claim that there **4** is an excess of too many pressing constraints on the federal budget to commit funds to federal land protection. But the 2014 budgets of the National Park Service, Fish and Wildlife Service, Forest Service, and Bureau of Land Management totaled significantly less than 1 percent of the national budget—hardly enough to make a considerable difference in overall government spending. Where protection does have a major economic impact is in local **5** communities visitors to protected lands need food, fuel, and lodging, and businesses that cater to these needs provide job opportunities in the surrounding communities.

3
A) NO CHANGE
B) being
C) to have
D) some

4
A) NO CHANGE
B) is too much of an excess of
C) are, in abundance, too many
D) are too many

5
A) NO CHANGE
B) communities; while visitors
C) communities, visitors
D) communities. Visitors

[6] In the western United States, federal control of large areas of land has been a source of political controversy. According to a report from Headwaters Economics, a research group that studies land management in the West, rural counties with more than 30 percent of their land under federal protection [7] saw job growth of more than 300 percent from 1970 to 2010. Rural counties with no protected land saw smaller increases in employment than did counties with protected land. A look at the economic effects of Yellowstone National Park reveals the profound impact

[6]

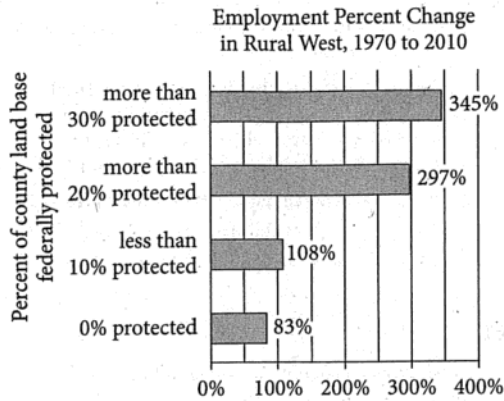Which choice provides the best introduction to the paragraph?

A) NO CHANGE

B) The influx of money from tourism is particularly important in areas such as the western United States, where most federally protected lands are located.

C) The national park that has the most dramatic economic impact on the surrounding area is Yellowstone National Park, which is spread across parts of Wyoming, Montana, and Idaho.

D) It is often a challenge to balance the interests of local industries with those of visitors to federally protected lands.

[7]

Which choice provides accurate and relevant information from the graph?

A) NO CHANGE

B) saw slightly less job growth than those with less than 10 percent of lands under federal protection

C) had rates of job growth that were considerably higher than those of rural counties in the eastern United States

D) saw job growth decline from nearly 350 percent to just under 300 percent

protected lands can have in a rural region. In 2013, Yellowstone had more than 3 million [8] tourists. They spent a total of nearly $380 million in and around the park. [9]

Employment Percent Change
in Rural West, 1970 to 2010

Adapted from Headwaters Economics, "West Is Best: How Public Lands in the West Create a Competitive Economic Advantage." ©2012 by Headwaters Economics.

[8]

Which choice most effectively combines the sentences at the underlined portion?

A) tourists, the ones who spent
B) tourists; spent was
C) tourists, who spent
D) tourists, but they spent

[9]

At this point, the writer wants to use information from the table below.

Economic Contribution of Tourists to
the Region of Yellowstone National Park

	Park visitors	Park visitor spending	Jobs created
Total	3,188,030	$381,763,000	5,300
From tourists	3,090,679	$379,900,000	5,277
Percent from tourists	96.95%	99.51%	99.57%

Adapted from Catherine Cullinane Thomas, Christopher Huber, and Lynne Koontz, *2013 National Park Visitor Spending Effects: Economic Contributions to Local Communities, States, and the Nation.* Published in 2014 by the National Park Service.

Which choice provides accurate and relevant evidence from the table to support the paragraph's claim?

A) These tourists made up nearly 97 percent of all the visitors to the park in that year.
B) This incoming money was enough to support more than 5,000 jobs in the Yellowstone region.
C) Residents of the region tended to spend less money in and around the park than tourists did.
D) As per-visitor spending in the park shows, visiting Yellowstone is a relatively economical vacation.

Many communities in the United States could gain significant tourist [10] revenue: if sites of natural beauty or historical significance—such as Idaho's Boulder-White Clouds and Utah's Cedar Mesa Plateau—were granted national park status. Given the economic benefits of protecting these and other proposed wilderness areas around the country, [11] additional laws are needed to ensure that the natural and historical legacy of the United States is preserved for future generations.

[10]

A) NO CHANGE
B) revenue, if sites of natural beauty,
C) revenue if sites of natural beauty,
D) revenue if sites of natural beauty

21

If $(x-2)^2 - 6(x-2) + 9 = 0$, what is the value of x ?

A) 2

B) 3

C) 5

D) 7

22

A chef plans to cook a maximum of 100 entrées for a dinner party; each entrée will include either chicken or fish. The cost of ingredients for each chicken entrée is $7, and the cost of ingredients for each fish entrée is $9. If no more than $850 can be spent on ingredients for the entrées and the chef cooks c chicken entrées and f fish entrées, which of the following systems best represents the constraints on c and f ?

A) $c + f = 16$
   $7c + 9f \leq 100$

B) $c + f \leq 100$
   $7c + 9f > 850$

C) $c + f \leq 100$
   $7c + 9f \leq 850$

D) $c + f = 100$
   $7c + 9f < 850$

23

If $x + y = 13$ and $x - y = 2$, what is the value of $x^2 - y^2$?

A) 4
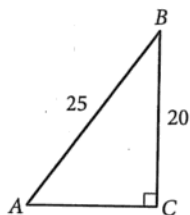
B) 26

C) 121

D) 165

24

Every Saturday, Bob bakes loaves of bread to sell at the farmer's market. Each loaf costs him $1 to make, and he sells the loaves for $3 each. He also pays a vendor's fee of $75 every Saturday to set up his booth. What is the least number of loaves of bread Bob needs to sell every Saturday to cover the cost of the vendor's fee?

A) 38

B) 37

C) 25

D) 19

25

In the right triangle above, the tangent of $\angle A$ is $\frac{4}{3}$.

What is the sine of $\angle B$?

A) $\frac{3}{5}$

B) $\frac{3}{4}$

C) $\frac{4}{5}$

D) $\frac{5}{3}$

26

$$wxy + xyz = wx + yz$$

In the equation above, w, x, and z are each greater than 1. Which of the following is equivalent to y ?

A) $-x$

B) $-\dfrac{1}{x}$

C) $\dfrac{1}{xz - z}$

D) $\dfrac{wx}{wx + xz - z}$

27

The pressure exerted on an object under water increases by 1 atmosphere every 33 feet below the surface of the water. At sea level, the pressure is 1 atmosphere. Which equation gives the total pressure p, in atmospheres, exerted on an underwater object at a depth of f feet below sea level?

A) $p = \dfrac{f}{33}$

B) $p = 33f$

C) $p = 33f + 1$

D) $p = \dfrac{f}{33} + 1$

28

Which of the following equations has a graph in the xy-plane with no x-intercepts?

A) $y = x^2 + 3x + 4$

B) $y = x^2 - 5x - 6$
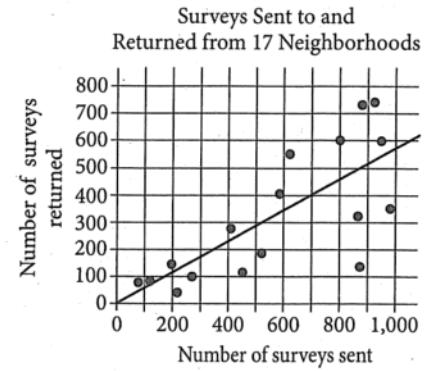
C) $y = 3x^2$

D) $y = 2x - 5$

29

$$y = 5x + 1$$
$$y = x^2 + 3x + 2$$

What is the y-coordinate of the point of intersection, in the xy-plane, of the graphs of the equations above?

A) 1

B) 2

C) $\dfrac{9}{4}$

D) 6

30

Which of the following expressions is equivalent to $(16x^2)^{\frac{1}{2}}$?

A) $4|x|$

B) $8|x|$

C) $\sqrt{8x}$

D) $16x$

31

Surveys Sent to and
Returned from 17 Neighborhoods

The scatterplot above shows the number of surveys sent to and returned from people in 17 different neighborhoods. A line of best fit for the data is also shown. For the neighborhood that had surveys sent to 800 people, which of the following is closest to the positive difference between the actual number of surveys returned and the number predicted by the line of best fit shown?
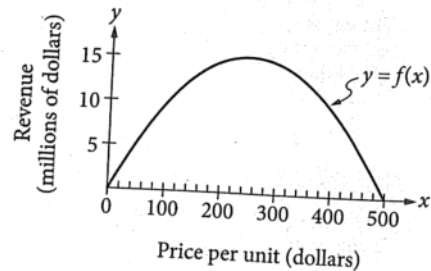
A) 150

B) 170

C) 200

D) 250

Questions 33 and 34 **refer to the following information.**

Annual Production (thousands of units)

	Factory W	Factory Z
Product P	21	32
Product Q	14	24

Projected Annual Revenue from Sales of Product P (millions of dollars)

$$f(x) = a(x - 250)^2 + k$$

A company makes and sells only two products, P and Q, and makes all products at factories W and Z. The table above shows the number of units of each product made at each factory during a year. The function f above represents the projected annual revenue from sales of product P as a function of the price per unit, where a and k are constants.

32

Based on the graph of f, which of the following is a factor of $f(x)$?

A) $x - 15$

B) $x - 240$

C) $x - 250$

D) $x - 500$

33

Which of the following is closest to the percent of the total number of units of products P and Q combined that are made at factory Z annually?

A) 38%

B) 56%

C) 62%

D) 91%

34

For 5 consecutive even integers, the sum of the first and third integer is 20 less than 3 times the fourth integer. What is the fifth integer?

A) 12

B) 14

C) 16

D) 26

35

A polling agency wanted to test whether a ballot measure would pass with greater than 50% yes votes. The agency sampled 1,000 registered voters selected at random, and 50.6% of the voters favored the ballot measure. The margin of error associated with this poll was ±3%. Based on the poll's results, which of the following statements must be true?

A) The percentage of voters who will vote yes for the ballot measure is 50.6%.

B) The ballot measure will pass with more yes votes than no votes, but the percentage of votes it will receive cannot be predicted.

C) The ballot measure will pass with at least 53.6% of the vote.

D) The poll's results do not provide sufficient evidence to conclude that the ballot measure will pass.

36

Treatment	Number of plants		
	Regressed	Thrived	Total
A	80	120	200
B	140	60	200

The table above shows the results of an experiment involving the effect of two treatments, A and B, on plants. Based on the results, what fraction of the plants that thrived received treatment A ?

A) $\dfrac{2}{5}$

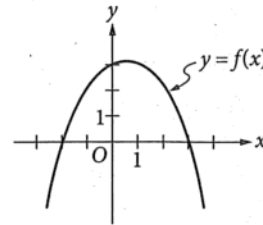B) $\dfrac{1}{2}$

C) $\dfrac{3}{5}$

D) $\dfrac{2}{3}$

37

A sample of seawater is 3.5% salt by mass and contains 1,000 grams of salt. Which of the following is closest to the mass, in grams, of the sample of seawater?

A) 28,600

B) 27,600

C)   965

D)   35

38

x	g(x)
−1	−2
0	2
1	0
2	−1
3	1

The graph of the function f is shown in the xy-plane above, and selected values for the function g are shown in the table. For which of the following values of x is $g(x) > f(x)$?

A) 0

B) 1

C) 2

D) 3

39

$$h(t) = -\frac{1}{175}t + 481$$

An archeologist estimates that, as a result of erosion, the height of the Great Pyramid of Giza has been decreasing at a constant rate since it was built. The function above is used by the archeologist to model the height $h(t)$, in feet, of the pyramid t years after it was built. According to the function, which of the following statements is true?

A) Every 1,750 years the height of the pyramid decreases by 10 feet.

B) Every 175 years the height of the pyramid decreases by 0.1 foot.

C) Every 100 years the height of the pyramid decreases by 1.75 feet.

D) Every year the height of the pyramid decreases by 175 feet.

40

A biologist grows a culture of bacteria as part of an experiment. At the start of the experiment, there are 75 bacteria in the culture. The biologist observes that the population of bacteria doubles every 18 minutes. Which of the following equations best models the number, n, of bacteria t hours after the start of the experiment?

A) $n = 75(2)^{\frac{t}{18}}$

B) $n = 75\left(1 + \frac{t}{18}\right)$

C) $n = 75(2)^{\frac{10t}{3}}$

D) $n = 75\left(1 + \frac{10}{3}t\right)$