- 30. What is the area, in square inches, of a circle with a diameter equal to 10 inches?
  - F. 100
  - G. 25
  - Η. 10π
  - J.  $25\pi$
  - **K.** 100π
- 31. To get a driver's license, an applicant must pass a written test and a driving test. Past records show that 80% of the applicants pass the written test and 60% of those who have passed the written test pass the driving test. Based on these figures, how many applicants in a random group of 1,000 applicants would you expect to get driver's licenses?
  - A. 200
  - **B.** 480
  - **C.** 600
  - **D.** 750
  - E. 800
- 32. If  $\sin A = \frac{4}{5}$ , then which of the following could be  $\tan A$ ?
  - **F.**  $\frac{1}{4}$
  - **G.**  $\frac{3}{4}$
  - **H.** 1
  - **J.**  $\frac{4}{3}$
  - **K.** 4
- 33. If x is any number other than 4 and 5, then  $\frac{(4-x)(x-5)}{(x-4)(x-5)} = ?$ 
  - A. -20
  - B. -1
  - C. (
  - D.
  - E. 20
- **34.**  $\sqrt{50} + \sqrt{128} = ?$ 
  - **F.**  $13\sqrt{2}$
  - G.  $14\sqrt{2}$
  - **H.**  $2\sqrt{5} + 2\sqrt{8}$
  - **J.**  $89\sqrt{2}$
  - K.  $\sqrt{178}$















 $\triangle$ 

2

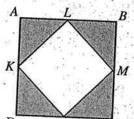
15. Triangle  $\triangle ABC$  is similar to  $\triangle DEF$ .  $\overline{AB}$  is 8 inches long,  $\overline{BC}$  is 10 inches long, and  $\overline{AC}$  is 16 inches long. If the longest side of  $\triangle DEF$  is 40 inches long, what is the perimeter, in inches, of  $\triangle DEF$ ?

A. 74

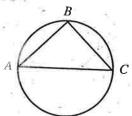
- B. 85
- C. 90
- D. 136
- E. 170
- 36. Sides  $\overline{AB}$ ,  $\overline{BC}$ ,  $\overline{CD}$ , and  $\overline{DA}$  of square  $\overline{ABCD}$  have midpoints L, M, N, and K, as shown below. If  $\overline{AB}$  is 6 inches long, what is the area, in square inches, of the shaded region?

F. 41/2

- G. 6\12
- В.
- J. 12V2
- K. 18



37. In the figure below,  $\overline{AC}$  is a diameter of the circle, B is a point on the circle, and  $\overline{AB} \cong \overline{BC}$ . What is the degree measure of  $\angle ABC$ ?



- A. 45°
- B. 60°
- C. 75°
- D. 90°
- E. Cannot be determined from the given information
- 38. In the standard (x,y) coordinate plane, what are the coordinates of the midpoint of a line segment with endpoints (-1,3) and (2,7)?
  - F.  $(\frac{1}{2},5)$
  - G.  $(1,\frac{9}{2})$
  - **H.**  $(\frac{3}{2},2)$
  - **J.** (1,4)
  - K. (3,4)



- 39. In a downhill ski race, Margo posted a time of 2 minutes and 24 seconds for a course 1.2 miles long. About how many miles per hour did she average for the race?
  - A. 60
  - **B.** 30
  - C. 20
  - **D.** 3
  - **E**. 2
- **40.** For the 2 functions f(x) and g(x), tables of values are shown below. What is the value of g(f(3))?

x	f(x)	25	x	g(x)
-5	7.	a 1, 27 5	-2	: 3
-2	-5		1	-1
1	3	S	2	-3
3	2	ole s	3	-5

- **F.** -5
- **G.** -3
- H. -1
- J. 100 2
- **K.** 7
- 41. For positive real numbers x, y, and z, which of the following expressions is equivalent to  $x^{\frac{1}{2}}y^{\frac{2}{3}}z^{\frac{5}{6}}$ ?
  - A.  $\sqrt[3]{xy^2z}$
  - B.  $\sqrt[6]{xy^2z^5}$
  - C.  $\sqrt[6]{x^3y^2z^5}$
  - **D.**  $\sqrt[6]{x^3y^4z^2}$
  - E.  $\sqrt[11]{xy^2z^2}$
- **42.** A formula for the area of a rhombus is  $A = \frac{1}{2}d_1d_2$ , where  $d_1$  and  $d_2$  are the lengths of the diagonals. Which of the following is an expression for  $d_2$ ?
  - F.  $\frac{2A}{d_1}$
  - G.  $\frac{A}{2d_1}$
  - H.  $\frac{Ad_1}{2}$
  - J.  $2(A-d_1)$
  - **K.**  $A \frac{d_1}{2}$

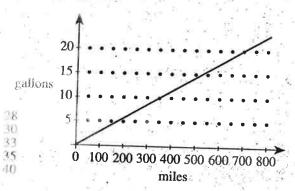
160

H.

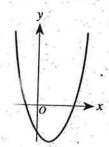
D.

DO YOUR FIGURING HERE.

43. The line graphed below shows the predicted gasoline use for a certain car. Which of the following is the closest estimate of this car's predicted rate of gasoline use, in miles per gallon?

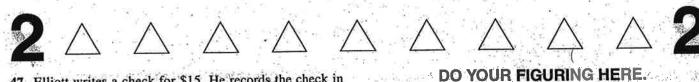


44. The graph of  $y = ax^2 + bx + c$  in the standard (x,y) coordinate plane is shown below.



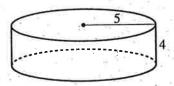
When y=0, which of the following best describes the solution set for x?

- F. 2 real solutions
- G. I double real solution only
- H. I real and I imaginary solution
- J. i double imaginary solution only
- K. Zimaginary solutions
- 45. If |y| = y + 6, then y = ?
  - A -10
  - B. -6
  - C. -3
  - D. 0
  - E. 6
- 46. What fraction lies exactly halfway between  $\frac{2}{3}$  and  $\frac{3}{4}$ ?
  - F. 3
  - **G.**  $\frac{5}{6}$
  - H.  $\frac{7}{12}$
  - **J.**  $\frac{9}{16}$
  - K.  $\frac{17}{24}$



- 47. Elliott writes a check for \$15. He records the check in his check register, which up to this time has shown the correct balance. When figuring his new balance, he accidentally adds \$15 instead of subtracting. The balance in his check register now shows:
  - \$30 less than it should.
  - \$15 less than it should.
  - the correct amount. C.
  - \$15 more than it should.
  - E. \$30 more than it should.
- 48. Six plants, each of a different plant type, are to be arranged on a display shelf's 6 spots. If each spot must have a plant, in how many different arrangements can the plants be placed?
  - F.
  - G.
  - 30 н.
  - 36
  - 720
- 49. In the standard (x,y) coordinate plane, what is the distance between the points (3,-4) and (-5,2)?

  - 6 В.
  - C.
  - D. 10
  - E. 14
- 50. A formula for the volume, V, of a right circular cylinder is  $V = \pi r^2 h$ , where r is the radius and h is the height. The cylindrical tank shown below has radius 5 meters and height 4 meters and is filled with water.



- If 1 cubic meter of water weighs approximately 2,205 pounds, then the weight, in pounds, of the water in the tank is:
- less than 200,000.
- between 200,000 and 400,000. G.
- between 400,000 and 600,000. H.
- between 600,000 and 800,000.
- K. more than 800,000.
- 51. What are the values of  $\theta$ , between  $0^{\circ}$  and  $360^{\circ}$ , when  $\tan \theta = -1$ ?
  - A. 225° and 315° only
  - B. 135° and 315° only

  - C. 135° and 225° only
     D. 45° and 135° only
  - 45°, 135°, 225°, and 315°

2

52. Which of the following is an equation of a circle with its center at (3,4) and tangent to the x-axis in the standard (x,y) coordinate plane?

$$F_{x} = (x-3)^{2} + (y-4)^{2} = 16$$

$$(x-4)^2 + (y-3)^2 = 16$$

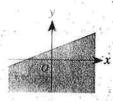
H. 
$$(x-4)^2 + (y-3)^2 = 9$$

$$(x-3)^2 + (y-4)^2 = 9$$

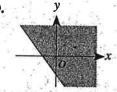
K. 
$$(x + 4)^2 + (y + 3)^2 = 16$$

53. Which of the following best represents the graph of  $y \le ax + b$  for some positive a and negative b?

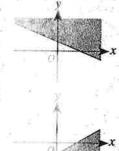
A



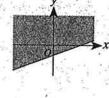
D.



69

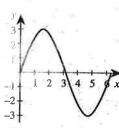


E.

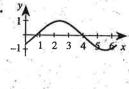


54. One of the graphs below is that of  $y = A \sin \theta$  for  $\theta$  between 0 and 6.28 radians, where A is a constant. Which graph?

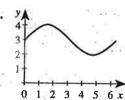
F.

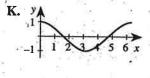


J.

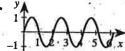


G.



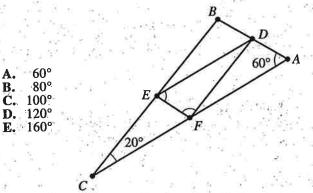


Н.

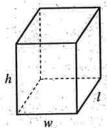




55. In the figure below, D, E, and F are the midpoints of the sides  $\overline{AB}$ ,  $\overline{BC}$ , and  $\overline{AC}$ , respectively. If the measure of  $\angle BCA$  is 20°, and the measure of  $\angle BAC$  is 60°, what is the sum of the measures of  $\angle DFE$  and  $\angle FED$ ?



56. A formula for the surface area (A) of the rectangular solid shown below is A = 2lw + 2lh + 2wh where l represents length; w, width; and h, height. By doubling each of the dimensions (l, w, and h), the surface area will be multiplied by what factor?



- F. 2 G. 4 H. 6 J. 8 K. 12
- 57. If  $\sin x = \frac{\sqrt{3}}{2}$  and  $\cos x = -\frac{1}{2}$ , then  $\sec x = ?$

**B.** 
$$-\sqrt{3}$$

C. 
$$-\frac{2}{\sqrt{3}}$$

**D.** 
$$\frac{2}{\sqrt{3}}$$











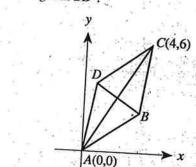








58. In a rhombus, all 4 sides are the same length. Rhombus ABCD below has vertices at A(0,0) and C(4,6). What is the slope of diagonal BD?



- A. Cannot be determined from the given information
- 59. Yvette earned a score of 56 on a recent 25-question multiple-choice exam. The scoring for the exam was +6 for each correct answer, -2 for each incorrect the maximum number of questions Yvette could have answered correctly?

1).

60. In the standard (x,y) coordinate plane, the graphs of the 3 equations x - 1 = 0, y + 2 = 0, and x + y = 4 form the boundary of a triangle. What is the area of this triangle, expressed in square coordinate units?

**END OF TEST 2** 

STOP! DO NOT TURN THE PAGE UNTIL TOLD TO DO SO. DO NOT RETURN TO THE PREVIOUS TEST.

#### **READING TEST**

## 35 Minutes-40 Questions

DIRECTIONS: There are four passages in this test. Each passage is followed by several questions. After reading a passage, choose the best answer to each question and fill in the corresponding oval on your answer document. You may refer to the passages as often as necessary.

#### Passage I

PROSE FICTION: This passage is adapted from "A New England Nun," a short story by Mary Wilkins Freeman (@1979 by The New American Library, Inc.).

Louisa was slow and still in her movements; it took her a long time to prepare her tea; but when ready it was set forth with as much grace as if she had been a veritable guest to her own self. The little square table stood exactly in the centre of the kitchen, and was covered with a starched linen cloth whose border pattern of flowers glistened. Louisa had a damask napkin on her tea-tray, where were arranged a cut-glass tumbler full of teaspoons, a silver cream-pitcher, a china sugar-10 bowl, and one pink china cup and saucer. Louisa used china every day—something which none of her neighbors did. They whispered about it among themselves. Their daily tables were laid with common crockery, their sets of best china stayed in the parlor closet, and 15 Louisa Ellis was no richer nor better bred than they. Still she would use the china. She had for her supper a glass dish full of sugared currants, a plate of little cakes, and one of light white biscuits. Also a leaf or two of lettuce, which she cut up daintily. Louisa was very fond of lettuce, which she raised to perfection in her little garden. She ate quite heartily, though in a delicate, pecking way; it seemed almost surprising that any considerable bulk of the food should vanish.

After tea she filled a plate with nicely baked thin 25 corn-cakes, and carried them out into the back-yard.

"Caesar!" she called. "Caesar! Caesar!"

There was a little rush, and the clank of a chain, and a large yellow-and-white dog appeared at the door of his tiny hut, which was half hidden among the tall 30 grasses and flowers. Louisa patted him and gave him the corn-cakes. Then she returned to the house and washed the tea-things, polishing the china carefully. . . . Louisa took off her green gingham apron, disclosing a shorter one of pink and white print. She lighted her 35 lamp, and sat down again with her sewing.

In about half an hour Joe Dagget came. She heard his heavy step on the walk, and rose and took off her pink-and-white apron. Under that was still another—

white linen with a little cambric edging on the bottom; 40 that was Louisa's company apron. She never wore it without her calico sewing apron over it unless she had a guest. She had barely folded the pink and white one with methodical haste and laid it in a table-drawer when the door opened and Joe Dagget entered.

He seemed to fill up the whole room. A little yellow canary that had been asleep in his green cage at the south window woke up and fluttered wildly, beating his little yellow wings against the wires. He always did so when Joe Dagget came into the room. . . .

50 She placed a chair for him, and they sat facing each other, with the table between them. He sat bolt-upright, toeing out his heavy feet squarely, glancing with a good-humored uneasiness around the room. She sat gently erect, folding her slender hands in her white-55 linen lap.

"Been a pleasant day," remarked Dagget.

"Real pleasant," Louisa assented, softly. "Have you been haying?" she asked, after a little while.

"Yes. . . . Pretty hot work.". . .

Presently Dagget began fingering the books on the table. There was a square red autograph album, and a Young Lady's Gift-Book which had belonged to Louisa's mother. He took them up one after the other and opened them; then laid them down again, the album 65 on the Gift-Book.

Louisa kept eyeing them with mild uneasiness. Finally she rose and changed the position of the books, putting the album underneath. That was the way they had been arranged in the first place.

70 Dagget gave an awkward little laugh. "Now what difference did it make which book was on top?" said he.

Louisa looked at him with a deprecating smile. "I always keep them that way," murmured she.

75 "You do beat everything," said Dagget, trying to laugh again. His large face was flushed.

He remained about an hour longer, then rose to take leave. Going out, he stumbled over a rug, and trying to recover himself, hit Louisa's work-basket on no the table, and knocked it on the floor.

He looked at Louisa, then at the rolling spools; he ducked himself awkwardly toward them, but she stopped him. "Never mind," said she; "I'll pick them up after you're gone."...

Louisa got a dust-pan and brush, and swept Joe Dagger's teack carefully.

If he could have known it, it would have increased his perplexity and uneasiness, although it would not have disturbed his loyalty in the least. . . .

- They were to be married in a month, after a singulas courtship which had lasted for a matter of fifteen years. For fourteen out of the fifteen years the two had not once seen each other, and they had seldom exchanged letters.
- The first paragraph suggests that Louisa's neighbors consider her to be:
  - a close friend
  - someone to be emulated.
  - a bit odd and stuck up.
  - a rich eccentric.
- 2. It is reasonable to infer from the passage that Joe trips on Louisa's rug because he is:
  - L usually reckless and careless.
  - II. always clumsy and weak.
  - [I] feeling uneasy at the moment.
  - lonly
  - G. III only
  - H. Land II only
  - Il and III only
- The evidence in the passage most strongly supports an inference that when he is at Louisa's house Joe pri
  - uncomfortable. A ...
  - B. amused.
  - €. happy.
  - annoved.
- It is reasonable to conclude from the sequence of events narrated in the passage that Louisa tells Joe she'll pick up the spools after he leaves because she:
  - wants to reassure him that the mess is unimportant
  - is trying to get him to pay more attention to her.
  - blames herself for leaving the work-basket where H. it could be knocked over.
  - fears that if he does it, he'll only create more dis-

- 5. The phrase "a veritable guest to her own self" (lines 3-4) most strongly suggests that Louisa:
  - pretends that she has visitors.
  - wishes she had company.
  - treats herself well.
  - D. is self-effacing and ill-at-ease in her own home.
- The passage suggests that Louisa often wears more than one apron at a time because she is:
  - F. forgetful.
  - G. modest.
  - H. methodical.
  - J. hypochondriacal.
- 7. Which of the following phrases best describes the way Louisa eats supper when she is alone?
  - Quickly and heartily
  - Daintily and with little appetite B.
  - Slowly and without pleasure
  - D. Meticulously but heartily
- 8. Given the evidence in the passage, which of the following statements describe(s) the way Joe feels about
  - I. He doesn't want to marry her.
  - II. He enjoys relaxing in her tidy home.
  - III. He is puzzled by her.
  - F. II only
  - G. III only
  - I and III only H.
  - J. II and III only
- 9. The description in the passage suggests that Joe seems "to fill up the whole room" (line 45) because:
  - A. Louisa is timid and ill-at-ease.
  - B. he is out of place.
  - C. he is aggressive and domineering.
  - D. he fills the room with his chatter.
- 10. Which of the following conclusions about Louisa's neighbors does the passage justify?
  - I. They dislike people who do things differently than they do.
  - They think Louisa is putting on airs.
  - III. They think Louisa is richer than they are.
  - F. I only
  - G. III only
  - H. I and II only
  - J. I and III only

### Passage II

SOCIAL SCIENCE: This passage is adapted from an article by David Ferman, "Too Much of a Good Thing," which appeared in the magazine Adbusters Quarterly (©1991 by Adbusters Media Foundation).

Kermit the Frog should be proud. At long last North America is learning what the famous amphibian has lamented for years: It's not easy being green.

The greening of our society has surpassed the 5 media trend phase, and has taken root in our culture as a permanent imperative, an ongoing reality that will affect every facet of our society.

When even corporate America takes (at least the rhetoric of) environmentalism to heart we can be confident that the movement has been firmly entrenched. When a corporate juggernaut like Procter & Gamble flies executives to a Victoria, B.C., city council meeting to beg that their disposable diapers not be banned from local landfills; and then offers to donate \$100,000 in seed money to the city's composting program, we can be certain that green will be around as long as greenbacks.

But a disturbing pattern has developed within the movement as it grows. The pattern goes like this: scien20 tists forecast a specific cataclysm (ozone depletion, global warming, rampant deforestation); the mass media disseminates the information (inevitably oversimplifying things); public reacts with shock and demands answers; the media redoes the story with 
25 household tips to prevent said cataclysm; corporate sector and finally government present "friendly" (bandaid) programs to slow down the inevitable; media drops the subject; public relaxes; scientists announce a new calamity ... and the merry jig goes on.

There are many drawbacks to this sort of feedback loop, not the least being that each successive crisis brings us closer to a jaded, "quit crying wolf" attitude. Our problem lies in the nature of reaction itself. Because environmental problems are so often presented 35 in an air of crisis, we lose the opportunity to calmly examine the source of the problems. When we do explore the reasons behind ecological threats, we delve no further than learning that, say, fluorocarbons from aerosols deplete upper atmosphere ozone. Rarely, if ever, do we face the fact that all these impending natural disasters stem from the same man-made source. All our specific little solutions make us miss the point of the problem as a whole. Virtuous consumption, bringing home CFC-free deodorant spray in a 45 biodegradable plastic bag, diverts our attention from the true source of our environmental woes-consumption itself.

Our culture's highest aim, some would argue our only aim, is to grow, to consume. Industrial and com50 mercial growth are the measures of our nation's strength. Our work ethic has been so twisted and

mutated that even language reflects that our dearest wish for ourselves is to grow, to be *productive*, and to consume.

This has not always been the case. As social critic Stuart Ewen recently noted, "Up until the 17th century, 'consumption' had a negative connotation, essentially it's about destruction." Later, during the 17th and 18th centuries, consumption gained a neutral sense in describing the new marketplace economics. By the 20th century consumerism and consumption were being exalted.

"To be a consumer is what we are," says Ewen.

"Consumption is the ideal we seek. Unfortunately, it is

55 still what it meant before the 17th century. A consumption-based economy is an economy driven by waste...

and therefore constant buying and disposing of goods starts clouding the environment, starts destroying the ozone layer, starts filling the waters that sustain us with

70 garbage... making life on earth impossible. Then we have to realize that consumption as a way of life has to be thrown into question."

But when our ancestors prayed and worked for growth and productivity they didn't have material gain as their only aim. Growth could also be gained in spiritual, educational and other realms. Somehow, somewhere, we lost sight of what success means and fashioned in its place a glorious, shining future where bigger is better, new is good, and old is to be replaced as quickly as possible. I don't think our forefathers and mothers would be satisfied with our fifty varieties of cereal, our traffic jams, our undisposable nuclear waste, and our landfills full of disposable diapers. Impressed? Yes. Horrified? Maybe. Satisfied? I doubt it. Even without knowing of the ecological drawbacks, they would probably say we are making pigs of ourselves: wasting far more than we use; and using much, much more than we need.

- 11. According to the passage, today's society judges our nation's strength by which of the following criteria?
  - A. A stringent work ethic
  - **B.** Individual political freedom
  - C. Neutral marketplace economies
  - D. Industrial and commercial growth
- 12. The passage suggests that environmentally conscious behaviors like using biodegradable plastic bags and CFC-free deodorant:
  - F. cannot change the face of American business practice.
  - G. are necessary only if we want to have a productive economy.
  - H. are superficial solutions to a much larger problem.
  - J. will eventually solve all our environmental problems.

- The passage indicates that one cause of the thinning of the ozone layer is:
  - A. the burning of disposable diapers.
  - B. the release of fluorocarbon gases.
  - C. overflowing landfills throughout the U.S.
  - D. CFC-free deodorant spray.
- 14. The author indicates that he feels consumption as it is practiced in our society to be:
  - F. materialistic.
  - the efficient.
  - menineni.
  - desiractive
- As it is used in line 62, the word exalted most nearly
  - A. crnicized.
  - B. ignored,
  - C. satisfied.
  - D. glorified.
- 16. As it is used in line 32, the phrase "quit crying wolf" most nearly means that:
  - after repeated cavironmental crises, the public grows doubtful of their seriousness.
  - environmentalists must stop complaining about mass media's inadequate coverage.
  - II. the public no longer believes corporate America's promises to clean up the environment.
  - the media has begun to challenge scientists' claims that each environmental problem is a serious

- 17. The author states that society doesn't get a chance to calmly examine the source of environmental problems because:
  - most people lack the necessary expertise to determine solutions.
  - the problems are frequently presented in an air of
  - most people are too intimidated to confront big business and the government.
  - the environmental movement has not yet been firmly established in the U.S.
- 18. The author of the passage claims that when the mass media ceases to cover an environmental story:
  - the public grows outraged and uneasy.
  - scientists attempt to find another calamity.
  - the public assumes the crisis has passed.
  - the government offers band-aid programs.
- 19. The passage indicates that today's society differs from that of our ancestors in that:
  - A. our ancestors were more critical of society.
    - our ancestors exalted consumerism. В.
    - today's society has a broader view of success.
    - D. today's society has a narrower view of success.
- 20. The passage indicates that the word consumption changed from a negative word to a positive word as:
  - American society's definition of success became limited to economic growth.
  - American culture became less materialistic.
  - American society made gains materially, educationally, and spiritually.
  - the greening of our society became entrenched.

# Passage III

HUMANITIES: This passage is adapted from Audreen Buffalo's article "Sweet Honey: A Cappella Activists," which appeared in Ms. magazine (©1993 by Lang Communications, Inc.).

In 1973, Bernice Johnson Reagon, vocal director of the D.C. Black Repertory Theater, was urged by members of the Washington, D.C.-based company to organize a singing group. Sweet Honey in the Rock was 5 the happy result. Using the original instrument—the human voice—aided only by shekere, tambourine, and microphone, the ensemble has built a reputation as the world's premier female a cappella ensemble [a group that sings without musical instruments accompanying 10 it].

In helping birth Sweet Honey, Reagon brought sure knowledge of music's informational and transformative power to the task. Her musical mission is rooted in the rural southern church pastored by her father. "For the first 11 years, our church had no piano, and I'm still an a cappella singer. I grew up singing in the nine-teenth-century congregational tradition—a style that can be traced to Africa."

In describing that tradition Reagon says:
20 "Spontaneity is one of the characteristics that mark congregational singing. Singers create as they go along. Although a leader introduces the song, there is no solo tradition. Once the song is raised, the group joins and the creation becomes collaborative. You must be open to what will happen to the song and you in performance."

Reagon's life continues to be informed by the Georgia community into which she was born and her early civil rights activism with the Student Nonviolent Coordinating Committee (SNCC). She, Rutha Mae Harris, Cordell Reagon, and Charles Neblett were members of the SNCC Freedom Singers. Appearing at hundreds of freedom rallies and mass meetings during the early 1960s, they were the movement's singing newspaper—reporting and defining the actions and issues from the civil rights war zones where they were frequently arrested. In many ways her mission has not changed.

Spirituality, consciousness-raising, social responsibility, healing, and—most of all—love resonate at the heart of Sweet Honey's repertoire. Songs such as "Patchwork Quilt," "Are My Hands Clean?" and the Grammy-nominated "Emergency," address AIDS, worker and environmental exploitation, and racism.

The first song Reagon taught the group was one she'd never sung but remembered from her youth, "Sweet Honey in the Rock." "When I asked my father about its meaning, he said it was a parable that referred to a land where, when rocks were cracked, honey would flow from them." Reagon came to interpret this as a metaphor for the legacy of African American women in the United States. Within many African traditions rocks

are considered living spirits. "So too, sometimes, we, black women, have had to have the standing power of 55 rocks and of mountains—cold and hard, strong and stationary. That quality has often obscured the fact that inside the strength, partnering the sturdiness, we are as honey. If our world is warm, honey flows and so do we. If it is cold, stiff, and stays put—so do we."

Reagon, Ysaye Maria Barnwell, Nitanju Bolade Casel, Shirley Childress Johnson, Aisha Kahlil, and Carol Maillard are the women who currently compose the musical collective. Over the years more than 20 singers have been members of the group.

The group meets, in the ancient way of women, communally. Each is aware of the others' unique contributions. Each serves as a master teacher in at least one repertoire or singing style and apprentices in an area covered by another member. They write, produce, discuss points of view, and develop ideas for songs and treatments.

The fluid communal spirit of the group is manifest in every performance.

"People who respond so enthusiastically to Sweet 75 Honey hear their own inner echo. They hear their names called, their thoughts confirmed," says Reagon.

"After a Sweet Honey performance, people often ask, 'Why do I feel so good after hearing songs that deal with issues I usually find paralyzing to think 80 about?'

"Life's challenges are not supposed to paralyze you, they're supposed to help you discover who you are. They're the prod that moves you forward.

"The civil rights movement was the most won85 derful thing I experienced in my life," Reagon muses.
"Day by day, I found courage to be who I was. Finding courage. Taking the risk. There was something about doing things that I had always been warned would kill or ruin you. Well, I did get suspended and I did go to 90 jail—things I had been told to avoid at all costs. But I found that if you avoided everything that was a risk, there would be many things you'd never know about yourself."

- 21. Reagon indicates that her experience in the civil rights movement made her more:
  - A. resentful.
  - B. serious.
  - C. confident.
  - D. social.

- 22. Reagon's remarks in lines 74-76 most strongly indicate that:
  - it the audience appreciates the variety of talents in the group.
  - 6. people in the audience learn new ideas from the group.
  - H. the group encourages the audience to participate in their songs.
  - J. people in the audience relate to the group's message.
- 23. The passage suggests that Reagon began singing a cappella because:
  - A set was the style of the SNCC Freedom Singers.
  - B. the D.C. Black Repertory Theater wanted her to.
  - C. there were no musical instruments in her church.
  - D. she wanted to honor African traditions.
- 24. It may be reasonably inferred from the eighth paragraph (lines 65-71) that the way the members of Sweet Honey in the Rock work together is designed to encourage:
  - E. cooperation and mutual respect.
  - G. musical progress through competition.
  - H. esteem for leadership and hierarchy.
  - J. political awareness and activism.
- 25. The author of the passage states that the group's com-
  - A. civil rights activists.
  - B. African Americans.
  - C. musicians.
  - P. WOREICH.
- 26. It may be reasonably inferred from the passage that the author considers Reagon's "sure knowledge" (line 12) to be a product of Reagon's experience:
  - F. singing in church and as a member of the SNCC Freedom Singers.
  - studying civil rights issues in school in the early 1960s.
  - H. learning first how to produce inspirational music with musical instruments.
  - building the world's premier female a cappella ensemble.

- 27. It may be reasonably inferred that the author's main purpose in writing this passage was to describe:
  - A. the accomplishments of Bernice Johnson Reagon and how she has influenced the group Sweet Honey in the Rock.
  - B. how the group Sweet Honey in the Rock worked hard to become the world's premier female a cappella ensemble.
  - C. how female artists, such as those in Sweet Honey in the Rock, often have a difficult time becoming successful.
  - D. the effect the civil rights movement had on Bernice Johnson Reagon, both personally and professionally.
- 28. In the third paragraph (lines 19-26), Reagon most strongly suggests that congregational singing requires singers to be:
  - F. methodical.
  - G. determined.
  - H. adaptable.
  - J. inspirational.
- 29. One of the main points Reagon makes in her comments in lines 53-59 is that:
  - A. the most admirable people are those who can be strong and stationary.
  - B. the best way for people to learn about themselves is to have the standing power of rocks.
  - C. people should make every effort to hide their inner feelings so that they are not vulnerable to others.
  - D. what people seem like on the outside isn't necessarily what they are like on the inside.
- 30. The passage indicates that, through the years, Sweet Honey in the Rock has changed significantly in terms of its:
  - F. mission.
  - G. members.
  - H. singing style,
  - J. intended audience.

## Passage IV

NATURAL SCIENCE: This passage is adapted from Richard Monastersky's article "Deep-See Shrimp," which was published in Science News magazine (@1989 by Science Service, Inc.).

The term "jumbo shrimp" has always tickled oxymoron-lovers. But scientists are chuckling at a new morsel of shrimp humor—the name Rimicaris exoculata.

In 1985, when researchers discovered these shrimp swarming around deep-sea geysers of super-heated water, they named the species exoculata, meaning "without eyes." It seemed a fair and accurate title for a shrimp that lacked the eyestalks and corneas other to shrimp use for vision.

But marine biologist Cindy Van Dover from the Woods Hole Oceanographic Institution and her colleagues report that the eyeless *R. exoculata* does indeed have eyes. For some reason, the forces of evolution have granted this shrimp a pair of unusual visual organs located on the animal's back.

The story of R. exoculata's eyes began in 1986 when Van Dover obtained some specimens of the shrimp in order to study their diet.

While studying the contents of the shrimps' stomachs, Van Dover began to focus on a strange patch located on the backs of the animals. This patch was hardly noticeable on the dead specimens that had been fixed in preservatives or frozen for lab study. But in 25 videotapes of the live animals in their natural habitat, taken from the deep submersible Alvin, the patches were reflective. The submarine's lights glinted off them as car headlights might set a cat's eyes aglow.

When Van Dover took a closer look at one of the specimens, she saw that the reflective patches seen on video were actually two lobe-shaped structures sitting underneath a thin, transparent layer of carapace, or shell-type material. A dissection showed that these lobes hooked into the shrimp's brain via a bundle of neurons that looked suspiciously like an optic nerve. She wondered: Could this be an eye?

She asked biochemist Ete Z. Szuts at Marine Biological Laboratory in Woods Hole to look for characteristic visual molecules in the lobes. Meanwhile, 40 bioengineer Steven C. Chamberlain, a specialist in the structure of invertebrate eyes from Syracuse University, examined the back organ to determine whether it was actually organized like eyes.

Chamberlain was able to detail the anatomy of the patch, but he could not pin down the function of this novel structure. "I wasn't willing to say it was a sensory organ; it could have been a gland," he says. Ultimately, it would be up to Szuts' lab to provide the key piece of proof that the organ must be a pair of eyes.

50 Szuts was looking for a visual pigment known as rhodopsin, which is the light-sensing molecule in all known types of eyes. Rhodopsin molecules are the switchboard in the eye, absorbing photons of visible light and initiating a neurologic message to the brain.

At the start, Szuts did not expect to find any rhodopsin when he ground up several of the organs for analysis. An animal's back just seemed to be the wrong place to put a pair of eyes. After all, he thought, other species of deep-sea shrimp have eyes in the normal place:

Besides, even if the back patch turned out to be two visual organs, other problems would seem to hinder the detection of any pigment. Normally, biochemists need concentrated extracts from some 50 to 100 shrimp 5 in order to detect any visual pigment molecules, says Szuts. But the number of available R. exoculata was limited, and he was dealing with extracts from 5 to 10 shrimp.

Szuts' skepticism turned to surprise when he 70 found the "eyeless" shrimp did have rhodopsin. "It turns out R. exoculata has a visual pigment, and it has it in very large quantities—at the very least five times more than the usual amount of pigment in other shrimp," he says. Because the bright lights of the sub-75 mersible most likely damaged much of the pigment in the collected shrimp, Szuts believes the pigment he found must be only a small fraction of the amount the animal truly possesses.

It doesn't take a microscope to see some of 80 R. exoculata's adaptations for sensing extremely weak light. Perhaps the most striking feature about the eyes is their size. Chamberlain believes they developed on the animal's back because that is the only spot where such large organs would fit.

85 R. exoculata's eyes have no lenses, so they cannot see actual images of an object. Just about all they can do is sense the strength and direction of a light source. Yet while they seem limited by the standards of animals living in bright light, the strange eyes are particu90 larly well adapted for their dark environment.

- 31. As it is used in line 46, the word novel most nearly means:
  - A. unfamiliar.
  - B. book-like.
  - C. typical.
  - D. inadequate.