
ENGLISH LANGUAGE SKILLS SAMPLE ITEMS

DIRECTIONS: For items 1 and 2, read the entire passage carefully and then answer the questions. (Note: Intentional errors have been included in this passage.)

(1)Florida's citizens face several serious environmental problems that may leave the state with fewer resources in the 21st century. (2)Garbage litters the streets, the beaches, and the waterways. (3)Another problem is the draining of swampland for irrigation of farmland. (4)Even proper disposal of this litter pollutes the state's air, land, and water. (5)The drying up of the swampland reduces the supply of fresh water for South Florida residents; in addition, the alteration of this habitat threatens the survival of aquatic species and waterfowl. (6)A third problem results when offshore drilling fouls the coastlines and kills marine life. (7)Finally, the gravest environmental problem is the rapid rate of urban and suburban development. (8)This development results in excessive demands on the state's natural resources, especially land and water. (9)Moreover, billboards are another source of revenue for the state. (10)Unless citizens and government officials cooperate to address these serious environmental problems, Florida's resources soon may be inadequate to support its growing population.

1. **Select the arrangement of sentences 2, 3, and 4 that provides the most logical sequence of ideas and supporting details in the paragraph. If no change is needed, select option A.**
 - A. Garbage litters the streets, the beaches, and the waterways. Another problem is the draining of swampland for irrigation of farmland. Even proper disposal of this litter pollutes the state's air, land, and water.
 - B. Garbage litters the streets, the beaches, and the waterways. Even proper disposal of this litter pollutes the state's air, land, and water. Another problem is the draining of swampland for irrigation of farmland.
 - C. Another problem is the draining of swampland for irrigation of farmland. Even proper disposal of this litter pollutes the state's air, land, and water. Garbage litters the streets, the beaches, and the waterways.
 - D. Even proper disposal of this litter pollutes the state's air, land, and water. Garbage litters the streets, the beaches, and the waterways. Another problem is the draining of swampland for irrigation of farmland.

2. **Which numbered sentence is LEAST relevant to the passage?**
 - A. sentence 7
 - B. sentence 8
 - C. sentence 9
 - D. sentence 10

3. Choose the most appropriate word to complete the sentence.

Although down by 21 points at halftime, the football team _____ and won by a field goal.

- A. intervened
- B. persisted
- C. relented

DIRECTIONS: For items 4-17, choose the option that corrects an error in an underlined portion. If no error exists, choose "No change is necessary."

4. Everyone except the principal is suppose to attend the meeting.

A B C

- A. accept
- B. principle
- C. supposed to
- D. No change is necessary.

5. Basketball players clearly need speed, physical size, and endurance;

A

however, without quick thinking, they will not be effective team members.

B C

- A. speed physical size
- B. however without
- C. thinking; they
- D. No change is necessary.

6. Students in Professor Garcia's algebra class should seek help in the Johnson

A B

Learning Center, located in the west end of the building.

C

- A. professor Garcia's
- B. Algebra
- C. West
- D. No change is necessary.

7. In *The Joy Luck Club*, a national best-seller. Amy Tan explores the world of Chinese-American families, and we realize how similar all families are.

A B
C

- A. Club a national
- B. best-seller, Amy
- C. families and
- D. No change is necessary

8. Because the teacher had assigned a research paper, the student should have went to the library instead of watching television.

- A. have gone
- B. had went
- C. of gone
- D. No change is necessary.

9. Since its founding over a decade ago, Habitat for Humanity helped to build homes for the poor throughout the country.

- A. helps
- B. is helping
- C. has helped
- D. No change is necessary.

10. The report that covers the results of several months of investigation are in the blue folder that the clerk has already filed.

A B
C

- A. cover
- B. is
- C. have
- D. No change is necessary.

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11. One of the boys in the class were on the team that has already finished the tasks that were assigned.
A B
C
- A. was
B. have
C. was
D. No change is necessary.
12. Residents and their state representative are concerned about pollution of the coastal areas. As urban development increases, they fear the sea turtles will lose its habitat.
A B
C
- A. his.
B. he fears
C. their
D. No change is necessary.
13. A tourist can travel to Costa Rica by flying from Miami to the capital, San José, and once there, they can rent a car.
- A. she
B. you
C. we
D. No change is necessary.
14. My little sister sat between Andra and me as we watched the basketball team defend its title.
A B
C
- A. I
B. us
C. it
D. No change is necessary.

15. Their surprising rude behavior hurt us deeply.

A B C

- A. surprisingly
- B. rudely
- C. deep
- D. No change is necessary.

16. Jack is the tallest of the two athletes.

- A. taller
- B. more tall
- C. most tall
- D. No change is necessary.

17. She was hoping to recieve her letter of acceptance into the competitive undergraduate program by March.

A B C

- A. receive
- B. acceptance
- C. competative
- D. No change is necessary.

18. Harvey, president of the student council and a senior, is addressing the faculty of Union High School, requesting the senior privilege of eating lunch outside. Choose the most appropriate opening statement.

- A. My learned and esteemed staff, please consider the ponderous issue of dining *al fresco*. The need for freedom is intrinsic and vital.
- B. The cafeteria is too crowded with noisy underclassmen. You guys wouldn't want to eat with them either.
- C. As you know, the cafeteria is overcrowded during lunch. Allowing the seniors to eat outside would ease this problem.
- D. We seniors are the leaders of the school and practically grown up. Isn't it time we were given a few privileges?

19. Choose the sentence in which the modifiers are correctly placed.

- A. Paul bought a donut from the local bakery filled with his favorite fruit.
- B. Filled with his favorite fruit, Paul bought a donut from the local bakery.
- C. Paul bought a donut filled with his favorite fruit from the local bakery.

20. Choose the sentence that is correctly punctuated.

- A. The mens floors, in three dormitories were repainted by the time school started in August.
- B. The men's floors in three dormitories' were repainted, by the time school started in August.
- C. The mens' floors in three dormitories were repainted by the time school started in August.
- D. The men's floors in three dormitories were repainted by the time school started in August.

Mathematics Reference Sheet

AREA



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



Rectangle $A = lw$



Trapezoid $A = \frac{1}{2} h (b_1 + b_2)$



Parallelogram $A = bh$

Circle $A = \pi r^2$

Circumference

$$C = \pi d = 2\pi r$$

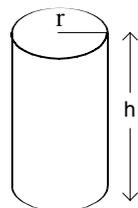
KEY

b = base	d = diameter
h = height	r = radius
l = length	A = area
w = width	C = circumference
S.A. = surface area	V = volume
	B = area of base

Use 3.14 or $\frac{22}{7}$ for π

Surface Area

1. Surface area of a prism or pyramid equals the sum of the areas of all faces.
2. Surface area of a cylinder equals the sum of the bases and its rectangular wrap.



$$\text{S.A.} = 2(\pi r^2) + 2(\pi r)h$$

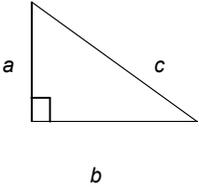
3. Surface area of a sphere: $\text{S.A.} = 4\pi r^2$

Volume

1. Volume of a prism or cylinder equals the Area of the Base (B) times the height (h).
 $V = Bh$
2. Volume of a pyramid or cone equals $\frac{1}{3}$ times the Area of the Base (B) times the height (h).

$$V = \frac{1}{3} Bh$$

3. Volume of a sphere: $V = \frac{4}{3} \pi r^3$

<p>Pythagorean theorem: $a^2 + b^2 = c^2$</p> 	<p>Given a line containing points (x_1, y_1) and (x_2, y_2)</p> <ul style="list-style-type: none"> ◆ Slope of line $\frac{y_2 - y_1}{x_2 - x_1}$ ◆ Distance between two points $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$ ◆ Midpoint between two points $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$
<p>Simple interest formula: $I = prt$</p> <p>I = simple interest, p = principal r = rate, t = time</p>	
<p>Distance formula: $d = rt$</p> <p>d = distance, r = rate, t = time</p>	

Conversions

1 yard = 3 feet = 36 inches
1 mile = 1,760 yards = 5,280 feet
1 acre = 43,560 square feet
1 hour = 60 minutes
1 minute = 60 seconds

1 cup = 8 fluid ounces
1 pint = 2 cups
1 quart = 2 pints
1 gallon = 4 quarts
1 pound = 16 ounces
1 ton = 2,000 pounds

1 liter = 1000 milliliters = 1000 cubic centimeters
1 meter = 100 centimeters = 1000 millimeters
1 kilometer = 1000 meters
1 gram = 1000 milligrams
1 kilogram = 1000 grams

Metric numbers with four digits are presented without a comma (e.g., 9960 kilometers)
For metric numbers greater than four digits, a space is used instead of a comma (e.g., 12 500 liters).

MATHEMATICS SAMPLE ITEMS

DIRECTIONS: Read each item and select the best response.

1. Order the following series of numbers from smallest to largest.

$$2^3, \sqrt{73}, 3^2, \frac{13}{2}$$

A. $\sqrt{73}, 2^3, 3^2, \frac{13}{2}$

B. $\frac{13}{2}, 2^3, 3^2, \sqrt{73}$

C. $2^3, 3^2, \frac{13}{2}, \sqrt{73}$

D. $\frac{13}{2}, 2^3, \sqrt{73}, 3^2$

2. A motor home rents for \$220 per week plus \$0.25 per mile. Find the rental cost for a 2-week trip of 500 miles for a family of 5.

A. \$ 345.00

B. \$ 565.00

C. \$2200.00

D. \$2825.00

3. Find the greatest common factor of 42 and 70.

A. 2

B. 4

C. 7

D. 14

4. Simplify:

$$8 - 4 \div 2 - 10 \div 2$$

A. 4

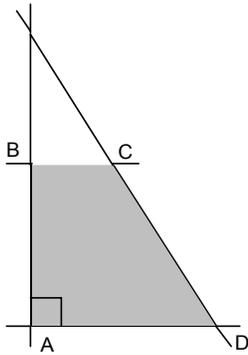
B. 1

C. -3

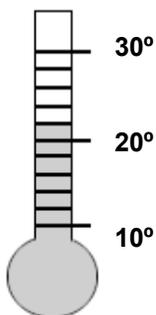
D. -4

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5. **Rodrigo wants to paint the walls and ceiling in a room that is 14 feet x 16 feet with an 8-foot-high ceiling. He will not paint the double door, which has a measurement of 6 feet x 7 feet. One gallon of paint will cover 350 square feet. The paint is sold in gallon containers only. How many gallons of paint will he need to buy?**
- A. 2 gallons
 - B. 3 gallons
 - C. 4 gallons
 - D. 5 gallons
6. **On a map, the distance between two cities is 8.5 inches. If $\frac{1}{2}$ inch represents 25 miles, how far, in miles, is it between the two cities (to the nearest mile)?**
- A. 106 miles
 - B. 213 miles
 - C. 425 miles
 - D. 850 miles
7. **Alicia wants to buy a carpet that is 12 feet x 15 feet. The cost of the carpet, including installation, is \$29.90 per square yard. Without including tax, how much does Alicia have to spend to carpet her room?**
- A. \$ 598.00
 - B. \$ 807.30
 - C. \$ 1614.60
 - D. \$ 5322.00

8. Select the most specific name for figure ABCD.

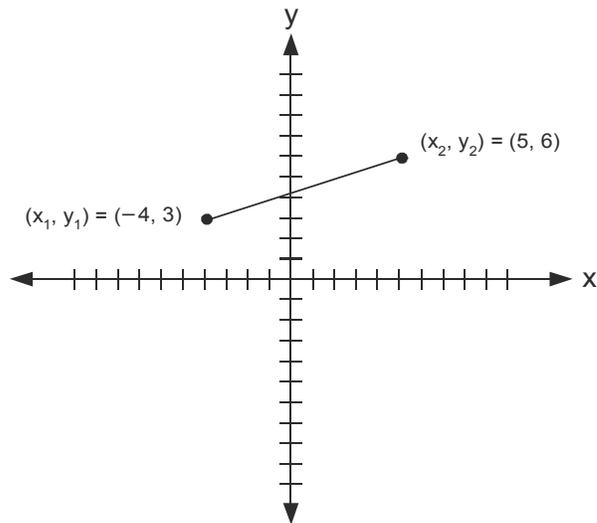


- A. square
 - B. rectangle
 - C. parallelogram
 - D. trapezoid
9. A radio station is going to construct a 12-foot tower for a new antenna on top of a tall building. The tower will be supported by three cables, each attached to the top of the tower and to points on the roof of the building which are 5 feet from the base of the tower. What is the total length of these three cables?
- A. 13 feet
 - B. 39 feet
 - C. 42 feet
 - D. 51 feet
10. What is the temperature to the nearest degree?



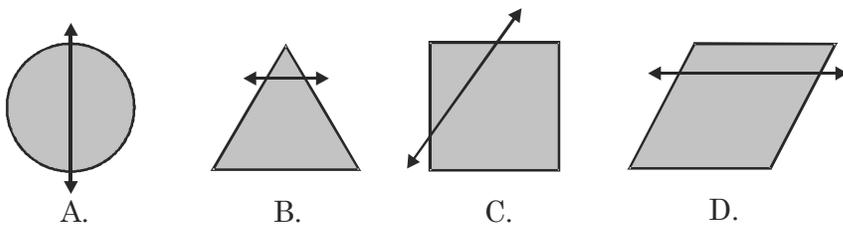
- A. 20.5°
- B. 21°
- C. 22°
- D. 24°

11. Find the slope of line segment AB.



- A. - 3
- B. $-\frac{1}{3}$
- C. $\frac{1}{3}$
- D. 3

12. Which of the following geometric objects contains a correctly drawn line of symmetry?



13. Find the missing number in the following sequence.

2, ____, 18, - 54, 162

- A. 6
- B. 3
- C. -3
- D. -6

14. Kinetic Energy (KE) is calculated by the formula $KE = \frac{1}{2} mv^2$ where m is mass and v is velocity. Translate the expression $\frac{1}{2} mv^2$ into words.

- A. half the product of m times v times v
- B. the quantity of half the mass times velocity, all squared
- C. half the square root of mass times velocity
- D. half the square of the quantity of mass times velocity

15. Solve for x

$$3(x + 4) = 6$$

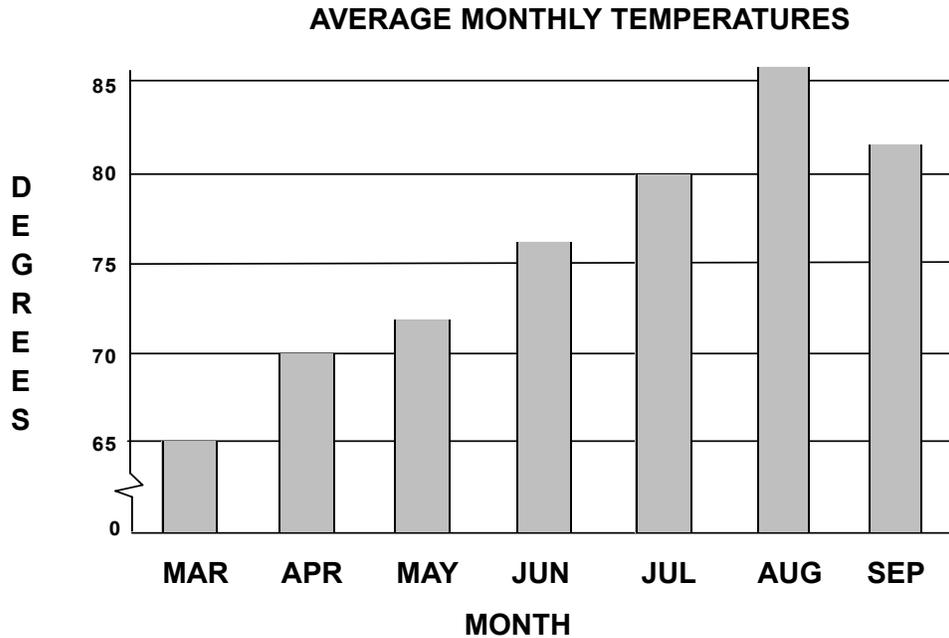
- A. - 2
- B. $\frac{2}{3}$
- C. $\frac{10}{3}$
- D. 6

16. Determine which of the ordered pairs listed below satisfies the given system.

$$\begin{aligned}x + 2y &= 3 \\2x + y &= 6\end{aligned}$$

- A. (0, 3)
- B. (1, 1)
- C. (2, 2)
- D. (3, 0)

17. The graph below represents the monthly average temperature for 7 months of the year. How much higher is the average temperature in July than it is in April?



- A. 3°
B. 5°
C. 10°
D. 15°
18. Given below are students' scores on an essay (possible score range is from 0 to 10). What is the median of the set of scores?

<u>Student</u>	<u>Essay Score</u>
A	8
B	5
C	4
D	2
E	4
F	1
G	7
H	8

- A. 3
B. 4.5
C. 4.9
D. 5

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19. Given a bag of 20 marbles containing 8 green, 4 red, 2 blue, and 6 yellow, if a person picks out a single marble from the bag without looking, what is the probability that it will be a red marble?
- A. $\frac{1}{20}$
 - B. $\frac{1}{10}$
 - C. $\frac{1}{5}$
 - D. $\frac{1}{4}$
20. A man has a choice of a white, yellow, or blue shirt. He also may select a red tie or a green tie. How many different outfits can he make of 1 shirt and 1 tie?
- A. 5
 - B. 6
 - C. 8
 - D. 9

READING SAMPLE ITEMS

DIRECTIONS: Read the following passage and answer questions 1 through 6.

The martial arts provide a well-rounded and fulfilling way to achieve physical fitness and psychological well-being. Martial arts serve not only as a complete exercise form emphasizing each area of fitness equally but also as a vehicle for stress reduction, increased self-confidence, and improved self-image.

Physical fitness refers to the capacity to perform at an optimal level in three closely related areas: strength, conditioning, and flexibility. Martial arts students are continually motivated to improve in each of these areas in order to better perform the skills associated with their art. For example, in karate, one form of martial arts, bold stances significantly stretch and strengthen the muscles of the legs, while kicking drills improve flexibility and balance, in addition to strengthening the hips and back.

Repetitions of karate hand strikes improve the muscle tone of the arms, shoulders, and upper back as well as enhance coordination and reflexes. Any combination of the above karate skills practiced vigorously over a period of 15 to 20 minutes daily will also provide an excellent aerobic workout and promote muscular endurance.

The physical benefits gained from the practice of martial arts are achieved indirectly through the students' concentration on the improvement of skills; therefore, fitness becomes the byproduct of effort directed toward another goal: self-defense. Certainly, this multifaceted approach to fitness constitutes a more interesting and motivating way to "get in shape" than more traditional forms of working out.

In terms of mental health or psychological well-being, the practice of martial arts is a wonderful method of stress reduction. Furthermore, its emphasis on character development as well as skill development promotes a positive attitude and goal orientation, both of which lead toward greater self-confidence and improved self-image.

Finally, in addition to these physical and psychological benefits, the practice of martial arts also provides valuable self-defense abilities that might at some point become necessary in order to maintain—in a more obvious and literal sense—one's physical well-being in the case of assault or attack. Confidence in the ability to defend oneself reduces the threat of intimidation from others, thus producing another very positive effect on one's psychological well-being.

Improving physical fitness and psychological well-being, acquiring self-defense methods, and emphasizing character development all make martial arts training a popular choice for health advocates worldwide.

1. Which sentence best states the main idea of this passage?
 - A. The martial arts are practiced worldwide by people interested in character development.
 - B. The martial arts provide physical and psychological benefits as well as valuable self-defense techniques.
 - C. The martial arts provide a variety of physical benefits for health enthusiasts.
 - D. The martial arts are a form of physical exercise that should be practiced by most people.

2. According to the passage, what is one way in which kicking drills contribute to overall well-being?

- A. improved muscle tone in the arms
- B. strengthened leg muscles
- C. increased coordination
- D. enhanced balance

3. As used in the second paragraph, the word optimal most nearly means

- A. high.
- B. positive.
- C. flexible.
- D. basic.

4. The tone of this passage can be described as

- A. caustic.
- B. objective.
- C. enthusiastic.
- D. pessimistic.

5. Identify the relationship between the following two sentences in the fifth paragraph:

"In terms of mental health or psychological well-being, the practice of martial arts is a wonderful method of stress reduction. Furthermore, its emphasis on character development as well as skill development promotes a positive attitude and goal orientation, both of which lead toward greater self-confidence and improved self-image."

The second sentence

- A. contradicts the first.
- B. restates the first.
- C. redefines the first.
- D. adds to the first.

6. Which word or phrase, when substituted for "Furthermore" in the fifth paragraph, would maintain the same relationship between the two sentences?

- A. In contrast
- B. Therefore
- C. In addition
- D. Obviously

DIRECTIONS: Read the following passage and answer question 7.

During the Great Depression, my parents and I lived with my grandmother, trying to survive on what little money was rescued from the bank before its collapse. At least we didn't lose our home, as did at least 25,000 other families displaced to "Hooverilles"—shack towns made from crates, boxes, and tin cans.

My father did lose his teaching job, however, joining some 13 million other unemployed who, in 1933, comprised the astonishing 25%-40% unemployment rate nationwide. A resourceful and optimistic soul, he planted a backyard vegetable garden and took charge of planning and cooking meals, buying only such staples as sugar, flour, dried beans, soap, toilet paper, and cereal from the grocery store, and meats, poultry, and eggs from the meat market. Frugal by nature, my father managed to get bargains on bones and organ meats, but since he was such a clever chef anyway, we always had a good meal, even if it was only creamed, spicy, hard-boiled eggs on toast with a vegetable. Frequently, we shared these simple meals with less fortunate homeless people who went door to door, volunteering to work for a hot dinner.

In the late spring, summer, and early fall we would make trips to the countryside to pick and/or buy in quantity berries, grapes, peaches, tomatoes, and apples. My father had fixed up an old stove, which he installed in the basement. There, using a wash kettle, he and my grandmother would can tomatoes, make tomato juice and root beer, and put up jellies and preserves. Although we lived in the highly industrialized city of Cleveland, Ohio, our life resembled that of a farm family living off the land.

Of course, we economized in every way possible. To save on doctors' bills and medicine, we treated ordinary ailments with something called "anti-phlogistine paste," a substance heated up and poured into a cloth, which we then applied to the offending chest cold, sore joint, or headache. To save on the cost of dry goods, my grandmother would rip worn sheets into half, sew the two selvage edges together, and hem the new outside edges. When those split sheets wore out, she would convert the usable material into pillow cases. To save precious gasoline, we walked; even in snowstorms and rain, we walked.

Nothing was wasted--but much was gained. When I compare my stories of the Great Depression with stories of other people who grew up during that difficult time, I am always struck by how the determination and generosity developed in order to survive such adversity rendered insignificant—even inspiring—the great hardships we endured.

7. The primary purpose of the passage is to

- A. entertain with interesting stories about the Great Depression.
- B. illustrate how difficulties during the Great Depression built character.
- C. argue the benefits of saving money during the Great Depression.
- D. identify the causes and effects of the Great Depression.

DIRECTIONS: Read the following passage and answer questions 8 through 11.

Although those who advocate a back-to-basics approach in education are chided as being reactionary and uninformed, their idea that certain knowledge, information, and critical thinking skills need to precede other courses and disciplines is a concept that certainly can be defended. Among the more important basic skills a student needs to have—and have as early as the first years of elementary school—is an understanding of grammar. While studies are often cited to prove that grammar is not successfully taught apart from writing, I dispute those studies on the basis of my own extensive experience as a college teacher.

First of all, grammar is not difficult. It is simple for a student to understand, for example, that breaking down compound constructions helps to determine the correct pronoun usage. "Bob and me went to the movies," therefore, is clearly wrong. If "Bob" is removed, the sentence reads "Me went to the movies," an unlikely construction indeed. The truth is, much grammar is this easy, and once students learn to have command of the rules and the usage, they feel empowered.

Many writing teachers maintain that students need "freewriting" and other such exercises to unblock their ideas; on the contrary, I maintain that students frequently clam up when they feel their prose is error-ridden. Under such circumstances, they become self-conscious and afraid to express themselves at all. Over the years, I have had many students say that knowing grammatical rules has in fact freed them to write without fear. Grammar stimulates creativity by giving students confidence that they will say things "right."

As unlikely as it might seem, grammar also provides a solid foundation for other thinking skills. There is a logic and beauty to the language that students come to appreciate; they benefit, too, by making some of the fine distinctions required in analyzing whether, for example, "The lock was broken" is in passive voice or is instead an instance of a participle functioning as a predicate adjective. Believe it or not, I have had some very lively class discussions because of that sentence. Students also marvel that one comma can actually reverse the meaning of a sentence, as in the example of "They didn't get married because they wanted their freedom," as opposed to "They didn't get married, because they wanted their freedom." The difference in meaning is substantial and definite. Students love it.

Frankly, I believe that grammar is currently in disrepute because so many teachers have forgotten the rules of grammar—that, or they find the subject less interesting than another approach; consequently, they *cannot* teach it. Unfortunately, this educational impasse leaves us with generation after generation of students who learn that their frustration with writing stems from being "blocked" rather than from being inadequately informed.

8. For this passage the author uses an overall organizational pattern that
- A. provides illustrations that support the teaching of grammar.
 - B. contrasts views concerning the value of teaching grammar.
 - C. outlines proper steps for teaching grammar.
 - D. summarizes many years of teaching grammar.

9. This passage illustrates bias in favor of

- A. teaching students grammar instead of writing.
- B. encouraging students to "freewrite" to unblock their ideas.
- C. teaching grammar to young students.
- D. making grammar rules more difficult for college students.

10. This passage illustrates bias against

- A. using "freewriting" to unblock ideas.
- B. stressing the importance of punctuation.
- C. requiring students to know the rules of language.
- D. teaching writing skills to college students.

11. The author's claim that "grammar is currently in disrepute" (paragraph 5) is

- A. valid because the author makes logical comparisons.
- B. valid because the author relates personal beliefs and experiences.
- C. invalid because the point is irrelevant in the discussion.
- D. invalid because insufficient factual evidence is presented.

12. Which sentence is a statement of opinion?

- A. Marshall graduated from Lincoln College in 1930 and went on to graduate from Howard University's law school.
- B. The significance of an event is easier to see in retrospect than it is while the event is occurring.
- C. The media marked his passing with eulogies, testimonials, remembrances, and biographies.
- D. Eventually, Marshall did argue cases in front of the Supreme Court.

13. What does the following sentence from the second paragraph suggest about Thurgood Marshall?

"Marshall's intimate familiarity with the Constitution enabled him to emerge successfully from the antagonistic nomination hearings in Congress years later."

- A. He was antagonistic toward government.
- B. He served in Congress for many years.
- C. He studied the Constitution thoroughly.
- D. He disagreed with the appointment process.

Answer Keys

English Language Skills

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

Mathematics

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

Reading

1. B	8. A
2. D	9. C
3. A	10. A
4. C	11. D
5. D	12. B
6. C	13. C
7. B	