

Opening Exam Directions

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In order to ensure an optimal simulated experience, **please adjust your browser window so that you can see all of the buttons on the bottom of the exam interface *without* needing to scroll down.** You should NOT see an active vertical scroll bar on the right of your browser window.

If you do see an active vertical scroll bar on the right side of your browser window, go to the VIEW menu at the top of the Internet Explorer window, then select TOOLBARS, and **uncheck** as many toolbars as necessary to eliminate the active vertical scroll bar. After doing this, you will no longer need to scroll down to see the buttons on the bottom of the exam interface. At the end of the exam, you may go back and re-check these toolbars to return to your normal view.

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Good luck practicing!

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AWA Essays

In the Analytical Writing Assessment, you will be asked to write 2 essays. You will have exactly 30 minutes to write each essay.

In the first essay, you are required to **analyze an argument**. Your task is to critique the argument, not to present your own view on the given subject.

In the second essay, you are required to **analyze an issue**. Your task is to present and support your particular view on the given issue.

AWA ESSAYS: ANALYSIS OF AN ARGUMENT

ESSAY QUESTION:

The following appeared in a medical magazine:

"Art and music have long been understood to have therapeutic effects for individuals who suffer from either physical or mental illnesses. However, most doctors rarely recommend to patients some form of art or music therapy. Instead, doctors focus almost all of their attention on costly drug treatments and invasive procedures that carry serious risks and side-effects. By focusing on these expensive procedures rather than low-cost treatments such as art and music therapy, doctors are doing a disservice to their patients and contributing to the rising cost of health care in the United States."

Discuss how well reasoned you find this argument. Point out flaws in the argument's logic and analyze the argument's underlying assumptions. In addition, evaluate how supporting evidence is used and what evidence might counter the argument's conclusion. You may also discuss what additional evidence could be used to strengthen the argument or what changes would make the argument more logically sound.

YOUR RESPONSE:

AWA ESSAYS: ANALYSIS OF AN ISSUE

ESSAY QUESTION:

"In making a complex decision, one should trust experience more than instinct."

Discuss the extent to which you agree or disagree with the position stated above. Support your viewpoint using reasons and examples from your own experience, observations, or reading.

YOUR RESPONSE:

Problem Solving

Each Problem Solving question consists of a quantitative question and 5 answer choices. Solve the problem and select the best of the given answer choices.

Note that all numbers given are real numbers. Figures are drawn as accurately as possible, except when explicitly stated otherwise.

1. The ratio of buses to cars on River Road is 2 to 23. If there are 630 fewer buses than cars on River Road, how many cars are on River Road?

- 30
- 60
- 660
- 690
- 750

2. $\frac{49 + 49}{49 + 49^2} =$

- $\frac{1}{49}$
- $\frac{1}{25}$
- $\frac{2}{49}$
- 2
- 49

3. What is the value of $\left(\sqrt{7+\sqrt{29}} - \sqrt{7-\sqrt{29}}\right)^2$?

- -26
- $2\sqrt{29}$
- $14 - 4\sqrt{5}$
- 14
- $14 + 4\sqrt{5}$

4. If the square root of p^2 is an integer, which of the following must be true?

I. p^2 has an odd number of factors

II. p^2 can be expressed as the product of an even number of prime factors

III. p has an even number of factors

- I
- II
- III
- I and II
- II and III

5. If \$ defines a certain operation, is $p \$ q$ less than 20?

(1) $x \$ y = 2x^2 - y$ for all values of x and y

(2) $p = 4, q = 10$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

6. Does the equation $y = (x - p)(x - q)$ intercept the x -axis at the point $(2,0)$?

(1) $pq = -8$

(2) $-2 - p = q$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

7. x is an integer greater than 7. What is the median of the set of integers from 1 to x inclusive?

(1) The average of the set of integers from 1 to x inclusive is 11.

(2) The range of the set of integers from 1 to x inclusive is 20.

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

8. $A, B, C, D, E, F, G,$ and H are all integers, listed in order of increasing size. When these numbers are arranged on a number line, the distance between any two consecutive numbers is constant. If G and H are equal to 5^{12} and 5^{13} , respectively, what is the value of A ?

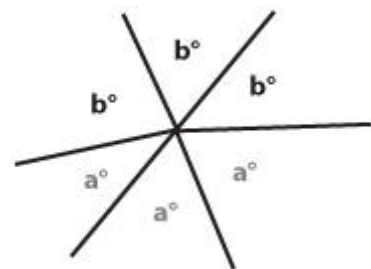
- $-24(5^{12})$
- $-23(5^{12})$
- $-24(5^6)$

- $23(5^{12})$
- $24(5^{12})$

9. If $1.5 = \frac{1.8}{x + 2}$, then $x =$

- -1.4
- -0.8
- 0.2
- 0.8
- 1.4

10. In the figure to the right is $b > a$? (Note: Figure not drawn to scale.)



(1) $a = 35$

(2) $a < 60$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

11. A sales associate earns a commission of 8% on her first \$10,000 in sales revenue in a given week and a commission of 10% on any additional sales revenue that the associate generates that week. How much sales revenue did the associate generate last week?

(1) The sales associate earned a total of \$1500 in commission last week.

(2) Last week, the sales associate was eligible for the 10% commission rate on \$7000 worth of sales.

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

12. If x and y are integers and $\frac{15^x + 15^{x+1}}{4^y} = 15^y$, what is the value of x ?

- 2
- 3
- 4
- 5
- Cannot be determined

13. If an item that originally sold for z dollars was marked up by x percent and then discounted by y percent, which of the following expressions represents the final price of the item?

- $10,000z + 100z(x - y) - xyz$

10,000
- $10,000z + 100z(y - x) - xyz$

10,000
- $100z(x - y) - xyz$

10,000

- $100z(y - x) - xyz$

$$10,000$$

- 10,000

$$100yz + xy$$

14. Eighty percent of the lights at Hotel California are supposed to be on at 8 p.m. a certain evening. However, forty percent of the lights that are supposed to be off are actually on and ten percent of the lights that are supposed to be on are actually off. What percent of the lights that are on are supposed to be off?

- $22\frac{2}{9}\%$
- $16\frac{2}{3}\%$
- $11\frac{1}{9}\%$
- 10%
- 5%

15. In the number $1.4ab5$, a and b represent single positive digits. If $x = 1.4ab5$, what is the value of $10 - x$?

(1) If x is rounded to the nearest hundredth, then $10 - x = 8.56$.

(2) If x is rounded to the nearest thousandth, then $10 - x = 8.564$.

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

16. In a single row of yellow, green and red colored tiles, every red tile is preceded immediately by a yellow tile and every yellow tile is preceded immediately by a green tile. What color is the 24th tile in the row?

(1) The 18th tile in the row is not yellow.

(2) The 19th tile in the row is not green.

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

17. If x is an integer, what is the value of x ?

(1) $2x - 3 < 5$

(2) $-4x < -8$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

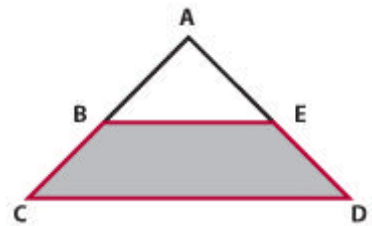
18. What is the sum of the multiples of 7 from 84 to 140, inclusive?

- 896
- 963
- 1008
- 1792
- 2016

19. In a room filled with 7 people, 4 people have exactly 1 friend in the room and 3 people have exactly 2 friends in the room. If two individuals are selected from the room at random, what is the probability that those two individuals are NOT friends?

- 5/21
- 3/7
- 4/7
- 5/7
- 16/21

20. If $BE \parallel CD$, and $BC = AB = 3$, $AE = 4$ and $CD = 10$, what is the area of trapezoid $BEDC$?



- 12
- 18
- 24
- 30
- 48

21. What is the value of x ?

(1) $x^3 + 2x^2 = 3x$

(2) $x^2 - 2x - 15 = 0$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

22. If m and n are nonzero integers, is m/n an integer?

(1) $2m$ is divisible by n

(2) m is divisible by $2n$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

23. Each of the 80 writers in a certain club is either exclusively left-handed or exclusively right-handed. If there are 12 more left-handed writers in the club than right-handed writers, how many of the writers are not left-handed?

- 28
- 32
- 34
- 46
- 52

24. If a , b , and c are integers and $\frac{ab^2}{c}$ is a positive even integer, which of the following must be true?

I. ab is even

II. $ab > 0$

III. c is even

- I only
- II only
- I and II
- I and III
- I, II, and III

25. Which of the following, when multiplied by itself, will yield a fraction greater than $\frac{2}{3}$?

- $\frac{5}{7}$
- $\frac{2}{3}$
- 0.7
- $(0.9)^2$
- 0.08

0.003

26. A cylindrical tank has a base with a circumference of $4\sqrt{\pi\sqrt{3}}$ meters and an equilateral triangle painted on the interior side of the base. If a stone is dropped inside the tank and the probability of the stone hitting the portion of the base outside the triangle is $\frac{3}{4}$, what is the length of a side of the triangle?

- $\sqrt{2\sqrt{6}}$
- $\frac{\sqrt{6\sqrt{6}}}{2}$
- $\sqrt{2\sqrt{3}}$
- $\sqrt{3}$
- 2

27. If n is not equal to 0, is $|n| < 4$?

(1) $n^2 > 16$

(2) $1/|n| > n$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

28. Is d negative?

(1) $e + d = -12$

(2) $e - d < -12$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

29. Is $x > y$?

(1) $\sqrt{x} > y$

(2) $x^3 > y$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

30. John and Peter are among the nine players a basketball coach can choose from to field a five-player team. If all five players are chosen at random, what is the probability of choosing a team that includes John and Peter?

- $1/9$
- $1/6$
- $2/9$
- $5/18$
- $1/3$

31. If y is not equal to 4 and $\frac{y^2 - 16}{3x} = \frac{y - 4}{6}$, then in terms of x , y equals

- $x + 8$
- $\frac{x - 8}{2}$
- $x - 8$
- $\frac{x - 8}{2}$
- $-3x$
- $\frac{-3x}{2}$
- $-3x + 8$
- $\frac{-3x + 8}{2}$
- $3x - 8$
- $\frac{3x - 8}{2}$

32. Laura can paint $\frac{1}{x}$ of a certain room in 20 minutes. What fraction of the same room can Joseph paint in 20 minutes if the two of them can paint the room in an hour, working together at their respective rates?

- 1
- $\frac{3x}{3x}$
- $3x$
- $\frac{x - 3}{x - 3}$
- $x - 3$
- $\frac{3x}{3x}$
- x
- $\frac{x - 3}{x - 3}$
- $x - 3$
- $\frac{x - 3}{x}$

33. Three business partners shared all the proceeds from the sale of their privately held company. If the partner with the largest share received exactly $\frac{5}{8}$ of the total proceeds, how much money did the partner with the smallest share receive from the sale?

(1) The partner with the smallest share received from the sale exactly $\frac{1}{5}$ the amount received by the partner with the second largest share.

(2) The partner with the second largest share received from the sale exactly half of the two million dollars received by the partner with the largest share.

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

34. If $a = 3^{b-1}$, what is the value of $a + b$?

(1) $3^{b+2} = 243$

(2) $a = 3^{2b-4}$

- Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.
- Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.
- Both statements TOGETHER are sufficient, but NEITHER one ALONE is sufficient.
- EACH statement ALONE is sufficient.
- Statements (1) and (2) TOGETHER are NOT sufficient.

35. If the box pictured to the right is a cube, then the difference in length between line segment BC and line segment AB is approximately what fraction of the distance from A to C ?



- 10%
- 20%
- 30%
- 40%
- 50%

36. On Tuesday, Kramer purchases exactly 3 new shirts, 2 new sweaters, and 4 new hats. On the following day and each subsequent day thereafter, Kramer wears one of his new shirts together with one of his new sweaters and one of his new hats. Kramer avoids wearing the exact same combination of shirt, sweater, and hat for as long as possible. On which day is this no longer possible?

- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday

37. $0.9999 + 0.8888 + 0.7777 + 0.6666 =$

- $(.3333)^3$
- 3
- 3.333
- 3.666
- 4

Sentence Correction

Each Sentence Correction question presents a sentence, part of which or all of which is underlined. Beneath the sentence you will find five ways of phrasing the underlined part.

Answer choice (A) repeats the original; answer choices (B), (C), (D), and (E) are different.

If you think the original is best, choose answer choice (A); otherwise choose one of the other answer choices--whichever is best.

The best answer choice is the one that conforms to the rules of standard written English and produces the most effective sentence. This answer should be clear and exact, without ambiguity, redundancy, or grammatical error.

1. Hoping to alleviate some of the financial burdens of a growing population, property taxes last year were raised by an eleven percent increase by the county government.

- property taxes last year were raised by an eleven percent increase by the county government
- property taxes were raised by eleven percent last year by the county government
- the county government raised property taxes by an eleven percent increase last year
- the county government last year raised by eleven percent property taxes
- the county government raised property taxes by eleven percent last year

2. The mountain cornfloss, native to the Rocky Mountains from Colorado to Canada and thought of as being the most beautiful of all wildflowers, grow on steep ledges and in deep cracks on remote mountaintops.

- and thought of as being the most beautiful of all wildflowers, grow on steep ledges
- and thought of as being the most beautiful of all wildflowers, grows on steep ledges

- and thought to be the most beautiful of all wildflowers, grow on steep ledges
- and thought to be the most beautiful of all wildflowers, grows on steep ledges
- and thought of as the most beautiful of all wildflowers, grow on steep ledges

Critical Reasoning

Each Critical Reasoning question presents a brief argument or situation, followed by a question and 5 answer choices. Select the best of the given answer choices.

3. Most water companies in the United States add fluoride to tap water to help prevent cavities. Some dentists argue, however, that this practice actually causes more harm than good because people overestimate the protection afforded by the fluoride and do not take the proper steps to care for their teeth, such as brushing and flossing after every meal. If water companies did not add fluoride, the dentists claim, people would be forced to be more active in their dental hygiene and tooth decay would decline as a result.

Which of the following, if true, most weakens the dentists' claims?

- Fluoride is widely used in commercially available dental care products.
- Most Americans are not aware that fluoride is added to tap water.
- Annual visits to the dentist are the most effective means of controlling tooth decay.
- The United States has the lowest rate of tooth decay in the world.
- Most Americans already brush their teeth daily.

4. Advocates insist that health savings accounts are an efficient method to reduce medical expenses. However, widespread adoption of these accounts will soon undermine the health of the populace because people will understandably be reluctant to deplete them except for emergencies, and thus will not get regular preventive and

screening examinations. Thus, their illnesses will not receive medical attention until they are advanced and thus will be more expensive to treat and less likely to be cured. Furthermore, the public's health will also be compromised because the poor will not be able to afford the health savings accounts and will therefore not receive even vaccinations against infectious scourges like measles.

The statements above, if true, most support which of the following?

- Wealthy individuals will not be affected negatively by health savings accounts.
- Private health insurance will no longer be available.
- Most diseases are detected during regular preventive examinations.
- Some people without health savings are likely to contract infectious diseases.
- The causal relationship between an individual's health and that person's medical care has been adequately documented.

5. The Department of Homeland Security has proposed new federal requirements for driver's licenses that would allow them to be used as part of a national identification system. Using licenses for purposes not directly related to operating a motor vehicle is un-American because it would require U.S. citizens to carry the equivalent of "papers". Such a requirement would allow the government to restrict their movements and activities in the manner of totalitarian regimes. In time, this could make other limits on freedom acceptable.

The author assumes which of the following?

- The next presidential election will be dishonest, as has happened in eastern European countries.
- The government will soon start curtailing the activities of those it considers "dissidents".
- Blanket restrictions on law-abiding individuals are contrary to the traditions of American culture and law.
- The majority of Americans are not willing to give up their right to travel and move about without identification.
- Americans should resist all government regulation of their lives.

Reading Comprehension

Reading Comprehension questions test your ability to answer questions based on reading passages. You will see several reading passages in the verbal section of the exam.

For each passage, you will be presented with a group of questions based on the content of that passage. Each question will have 5 answer choices. Select the best answer to each question on the basis of what is stated or implied in the particular passage.

In April 1841, medical missionary Reverend Peter Parker, M.D., addressed an enthusiastic audience gathered at a special meeting of the Boston Medical Association. His subject was "the condition and prospects of the hospitals of China." He described his own work at the hospital he had established in the foreign factory district outside the city walls of Canton where he offered free treatment for both rich and poor. At *P'u Ai I Yuan* (Hospital of Universal Love, as it was known in Chinese) Parker and his colleagues used western surgical techniques as a means to facilitate religious conversion. Medicine, Parker believed, could be the "handmaid of religious truth," and he held regular religious services for his patients.

While he had, at best, modest success attracting converts to Christianity, the hospital had fostered tremendous goodwill among the Chinese. It was a bright spot amid the gloomy period of Western-Chinese tension that led to the outbreak of the Opium Wars between Great Britain and China. Forced to flee Canton because of these rising hostilities, Parker returned to the United States to raise money and interest in his operations. In the spring of 1841, he spoke to many religious societies, a few medical bodies, and even the United States Congress, where he preached to members of the House and Senate and lobbied legislators on the need for diplomatic relations with China.

In his talks, Parker described the state of medical and surgical knowledge--or, rather, scientific ignorance--in China. Despite the surgical feats of legendary ancient doctors like Hua T'o of the third century A.D., surgery did not develop to any great extent in China. Some accounts attribute this to Confucian precepts about the integrity of the body and proscriptions against any form of

pharmacological tendencies within traditional Chinese medicine and a preference for moxas and other caustic plasters.

Whatever the cause, it was undoubtedly the case that Parker's surgical practice tapped into a huge unmet need. Almost as soon as he opened his Ophthalmic Hospital in Canton, as it was known in English, he acquired a reputation as a surgeon of such skill that the hospital quickly became a general hospital. Parker and his small staff handled thousands of cases each year, treating more than fifty thousand cases by the 1850s. His hospital became the model for other medical missions, and Parker and his British colleagues formed the Medical Missionary Society of China to coordinate the efforts of all the western hospitals springing up in the trading ports of Asia. Parker earned his reputation performing operations to remove tumors and cataracts--forms of surgery with relatively good odds of success and ones that could be accomplished quickly, important in an era without anesthetics. Because of the absence of surgery in China, a large number of patients were afflicted with mature tumors (typically five to thirty-five years old) of a size seldom seen in Europe or the United States. Parker was able to help these patients in ways previously thought impossible in China. He has thus been credited with bringing Western medicine to the most populous country on Earth.

6. The author mentions Hua T'o (line 40) most probably in order to

- underscore the need for modernization of 19th century Chinese medicine
- trace the history of important figures in Chinese medicine
- call attention to the lack of leading physicians in 19th century China
- celebrate the historical achievements of Chinese physicians
- defend Chinese medicine against unfair criticism

7. According to the passage, all of the following are true of Peter Parker EXCEPT:

- He was skilled as a surgeon.
- He believed that the poor deserved quality medical treatment.
- He felt disdain for the medical practices of the 19th century China.

- He lobbied intensely to bring Western medical knowledge to China.
- He did not achieve his missionary goals in China.

8. The primary purpose of the passage is to

- discuss the status of the medical profession in China before the arrival of Peter Parker
- argue that China could not have gained modern medical knowledge without the influence of Peter Parker
- demonstrate the need in China before the 19th century for outside medical knowledge
- challenge the predominant view of 19th century Chinese medicine
- examine the circumstances of the introduction of Western medicine to 19th century China

9. The spending on durable goods like household appliances and automobiles is a cyclical pattern that depends on if the overall economy is healthy, whereas non-durable goods like food and shelter remain constant regardless of the economy.

- The spending on durable goods like household appliances and automobiles is a cyclical pattern that depends on if the overall economy is healthy, whereas non-durable goods like food and shelter remain constant regardless of the economy.
- Regardless of the economy, spending on non-durable goods like food and shelter remains constant even though spending on durable goods like household appliances and automobiles is a cyclical pattern that depends on whether the overall economy is healthy.
- Spending on durable goods such as household appliance and automobiles follows a cyclical pattern that depends on the health of the overall economy, whereas spending on non-durable goods such as food and shelter remains constant regardless of the economy's health.
- Whether the overall economy is healthy determines the cyclical pattern of spending on durable goods such as household appliances and automobiles, whereas non-durable spending

such as food and shelter remains constant regardless of the economy.

- The cyclical pattern of spending on durable goods such as household appliances and automobiles depends on whether the overall economy is healthy but non-durable goods like food and shelter remain constant regardless of the economy.

10. Rather than accept the conventional wisdom that the earth was flat, Christopher Columbus was sent by the king and queen of Spain to see if he could reach India by traveling west.

- Rather than accept the conventional wisdom that the earth was flat, Christopher Columbus was sent by the king and queen of Spain to see if he could reach India by sailing west
- Rather than accepting the conventional wisdom that the earth was flat, Christopher Columbus was sent by the king and queen of Spain to see if he could reach India by sailing west
- Instead of accepting the conventional wisdom that the earth was flat, Christopher Columbus sailed west to see whether he could reach India, having been sent by the king and queen of Spain
- Rather than accept the conventional wisdom that the earth was flat, Christopher Columbus sailed west to see whether he could reach India, having been sent by the king and queen of Spain
- Instead of accepting the conventional wisdom that the earth was flat, Christopher Columbus was sent by the king and queen of Spain to sail west to see if he could reach India

11. Some scientists suggest the moon had been formed out of part of the Earth, which was dislodged perhaps by a meteor.

- the moon had been formed out of part of the Earth, which was dislodged perhaps
- that the moon was formed from part of the Earth that had perhaps been dislodged
- that part of the Earth formed the moon, which was dislodged perhaps
- the moon was formed out of part of the Earth, having perhaps been dislodged

- that the moon had been formed from part of the Earth, which perhaps had been dislodged

12. For years, the debate over public education reform has centered on financing. Many claim that pouring more money into the public schools will improve student performance. However, the only way to fix our school systems is to inject new ideas and new approaches. Today the schools are organized to benefit their adult employees rather than the students.

Which of the following, if true, best weakens the argument?

- Schools that have instituted “new approaches” attract the best performing students.
- Schools without outside playgrounds have lower levels of student performance than schools that do.
- Studies show that student performance corresponded most directly with the education of the students’ families.
- School employees, by an overwhelming margin, said that the system performed well, citing superior benefits than those available in comparable private institutions.
- Researchers in education have shown that students from school districts with high per-capita spending tend to receive higher scores on standardized tests.

13. A newly discovered painting on wooden panel by Michelangelo must have been completed after 1507 but before 1509. It cannot have been painted earlier than 1507 because one of its central figures carries a coin that was not minted until that year. It cannot have been painted after 1509 because it contains a pigment that Michelangelo is known to have abandoned when a cheaper alternative became available in that year.

Which of the following is an assumption on which the argument depends?

- No stocks of the abandoned pigment existed after 1509.
- Michelangelo did not work on the painting over the course of several years.

- The coin depicted in the painting was known to general public in 1507.
- The wooden panel on which the painting was executed cannot be tested accurately for age.
- Michelangelo's painting style did not change between 1507 and 1509.

14. Weight loss programs that guarantee results mislead their customers. No program can ensure that someone who follows it will lose weight. These programs prey upon unhappy and insecure people who are often driven more by emotion than by reason. **Moreover, many people who lose weight while on a program eventually regain the weight within a year.** So while the programs' claims may be true for a short period, customers will be disappointed in the long run.

The two portions in boldface play which of the following roles?

- The first is a generalization; the second is a consequence of that generalization.
- The first is the author's position; the second is a consideration in support of that position.
- The first is an opinion under examination; the second is evidence weighing against that opinion.
- The first is an assertion that the author questions; the second is evidence in support of that assertion.
- The first is evidence in support of the author's main point; the second is the author's main point.

When they first arrived in America as slaves in the 1600's, Africans joined a society that was divided between master and white servants brought from Europe. In most parts of the South, some of these first African slaves became free, either through escape or through emancipation by their owners. It is therefore a misconception that all African Americans in the pre-Civil War South were slaves. Many researchers have also assumed that these free African Americans were the offspring of white slave owners who took advantage of their female slaves. However, these cases represent only a small minority of free African Americans in the South. Most free African Americans were actually the descendants of

African American men and white servant women.

In fact, despite the efforts of the various colonial legislatures, white servant women continued to bear children by African American fathers through the late seventeenth century and well into the eighteenth century. It appears that they were the primary source of the increase in the free African American population for this period. Over two hundred African American families in Virginia descended from white women. Forty-six families descended from freed slaves, twenty-nine from Indians, and sixteen from white men who married or had children by free African American women. It is likely that the majority of the remaining families descended from white women since they first appear in court records in the mid-eighteenth century when slaves could not be freed without legislative approval, and there is no record of legislative approval for their emancipations.

The history of free African Americans families in colonial New York and New Jersey, by contrast, is quite different from that of free African Americans in the South. Most were descended from slaves freed by the Dutch West India Company between 1644 and 1664 or by individual owners. Researchers have studied these families, especially a group of fourteen families that scholars have traced through at least three generations. None of the fourteen families appears to be descended from a white servant woman and an African American man. However, Lutheran church records in the eighteenth century show a few couples like this having children baptized.

15. According to the passage, which of the following is a difference between free African Americans in colonial New York and New Jersey and free African Americans in the colonial South?

- Those in New York and New Jersey were primarily descended from freed slaves while those in the South were primarily descended from white women.
- Those in New York and New Jersey were primarily descended from white women while those in the South were primarily descended from freed slaves
- Both groups of African Americans were primarily descended from freed slaves, but those in the North had been freed earlier.
- Both groups of African Americans were primarily descended from freed slaves, but those in the South had been freed earlier.

- Those in the South could be freed only with legislative permission.

16. The author of the passage is primarily interested in

- defending an accepted position on colonial history
- analyzing an unproven hypothesis regarding slavery
- presenting an alternate view of an historical period
- critiquing an outdated theory of colonial development
- describing the culmination of an historical trend.

17. The passage suggests which of the following about African American families in colonial New York and New Jersey?

- They were not descended from white servant women and African American men.
- They were less numerous than African American families in the colonial South.
- Most of them were started between 1644 and 1664.
- They began with an initial group of fourteen families.
- Some of them may have descended from white servant women.

18. Which of the following can be inferred from the passage?

- No free African Americans in the American colonies were the offspring of white slave owners.
- Some colonial legislatures passed laws to prevent interbreeding between white colonists and African Americans.
- White servants were not as numerous as African American slaves in early America.
- Most African Americans in the South were born into slavery.
- Records exist to document all births of free African Americans in colonial America.

19. The passage suggests which of the following about African American slaves in the late 1700's?

- They could not own land without consent of local white landowners.
- They were barred from practicing certain trades.
- They could buy their freedom from their owners.
- They sometimes had children with white women even while enslaved.
- There were none in colonial New York or New Jersey.

20. Improved technology and equipment often result in fewer injuries during high-risk activities such as rock climbing and scuba diving. But participant education also plays a large role in reducing the number of injuries sustained during these activities. People who are poorly trained in these activities run a much higher risk of injury even if provided with the latest and best equipment.

Which of the following can be properly inferred from the information above?

- Training is a more important safety factor than equipment in high-risk activities.
- People who are properly trained in their activities do not sustain injuries.
- The safety benefits of the latest equipment can be offset by inadequate preparation.
- Rock climbing and scuba diving are more risky than any other activities.
- People with the latest equipment often neglect proper training.

21. The exchange rate between the currency of Country X and that of Country Y has historically favored the currency of Country Y. Because of this, citizens of Country Y often take their vacations in Country X, where the exchange rate makes hotels and restaurants more affordable. Yet, citizens of Country Y rarely purchase clothing or electronics in Country X, despite the fact that those items are more expensive in their home country, even when sales taxes are taken into account.

Which of the following, if true, would best explain the buying habits of the citizens of Country Y?

- Citizens of Country Y prefer the fashions available in their own country.
- Stores in Country X receive the latest fashions and technology several months after they are available in Country Y.
- The citizens of Country X resent the buying power of the currency of Country Y.
- The government of Country Y imposes tariffs on imported goods.
- The currencies of Country X and Country Y are both weak compared to the currency of Country Z.

The next 2 questions are based on the following passage:

Because of a rare type of fungus that killed off many cacao trees in Brazil, there was an unusually meager harvest of cocoa beans this year. The wholesale price of cocoa solids and cocoa butter has increased significantly and does not look likely to fall in the foreseeable future. As a result, the retail price of chocolate is certain to increase within six months.

22. Which of the following, if true, most seriously weakens the argument above?

- Consumers will purchase other sweets if the price of chocolate increases.
- Researchers have discovered an effective method to kill the fungus.
- Dark and bittersweet varieties of chocolate will be affected more seriously than milk varieties.
- The price of chocolate has decreased steadily for three years.
- Most chocolate in stores is manufactured from cocoa that was purchased two years earlier.

23. Because of a rare type of fungus that killed off many cacao trees in Brazil, there was an unusually meager harvest of cocoa beans this year. The wholesale price of cocoa solids and cocoa butter has increased significantly and does not look likely to fall in the foreseeable future. As a result, the retail price of chocolate is certain to increase within six months.

The answer to which of the following questions would provide information relevant to evaluating the claims made in the argument above?

- Has the price of cocoa remained steady during other period of poor harvest?
- Are consumers willing to spend more for chocolate?
- Have the prices of other ingredients in chocolate decreased recently?
- What percentage of cacao trees in Brazil were affected by the fungus?
- Can the fungus be eliminated within the next six months?

24. Recent studies suggest that intake of vitamin E in excess of that found naturally in a balanced diet may actually increase the risk of developing certain illnesses, despite the claims of thousands of people who swear by it as a dietary supplement.

- Recent studies suggest that intake of vitamin E in excess of that found naturally in a balanced diet may actually increase the risk of developing certain illnesses,
- Recent studies suggest that taking vitamin E in excess of that found naturally in a balanced diet actually increases the risk of developing certain illnesses,
- Certain illnesses may be at a higher risk of development if vitamin E is taken in excess of a balanced diet, according to recent studies,
- According to recent studies, the intake of vitamin E, if in excess of that found naturally in a balanced diet, may actually increase developing certain illnesses,
- Vitamin E, recent studies suggest, if in excess of that found naturally in a balanced diet, may actually increase the development risk of certain illnesses,

25. The pigments used in modern oil paints are different than the ones used in older paints because they are more lightfast and vibrant.

- are different than the ones used in older paints because they are

- differ from those used in older paints in that the modern ones are
- are different than those used in older paints because the modern ones are
- are different from the ones used in older paints on account of being
- differ from the ones used in older paints because they are

New research by Paul Fildes and K. Whitaker challenges the theory that strains of bacteria can be "trained" to mutate by withholding a metabolite necessary for their regular function. In particular, they consider the case of Bacteria *typhosum*, which needs tryptophan in order to reproduce. Earlier researchers had grown the bacteria in a medium somewhat deficient in tryptophan and observed the growth of mutant strains of the bacteria which did not need tryptophan in order to reproduce.

Fildes and Whitaker argue that the withholding of tryptophan did not induce these mutant strains of bacteria. Rather, these mutants were already present in the original sample of bacteria *typhosum*, albeit in a concentration too small to detect. In experimenting with the bacteria grown in agar cultures, they found that by plating out huge quantities of the bacteria, one could locate mutant strains. Because of the possibility that the lack of uniformity of the agar cultures had in fact trained mutant strains, they conducted similar experiments with liquid cultures and again found that mutant strains of the bacteria were present in the original sampling. From these experiments, Fildes and Whitaker conclude that the mutants are of genetic origin and are not induced by environmental training. They asserted that the concentration of tryptophan is unrelated to the appearance of these mutants in the bacteria.

To confirm these results, Fildes and Whitaker used an innovative plating technique using pile fabrics, such as velvet or velveteen, to accurately imprint the growth found on an original agar plate to a series of replica agar plates. The process entails taking the original agar plate, inverting it onto the velvet while using light finger pressure to transfer growth, and then imprinting the fabric, with its pattern of growth, on the new agar plates. By using this replica plating method, Fildes and Whitaker demonstrated that the mutants were in fact genetically present or preadapted, as the locations of the mutant strains of bacteria on the replica plates were

identical to the locations of the mutant strains on the original agar plate.

26. Which of the following most accurately states the purpose of the passage?

- To defend a scientific hypothesis from attack by an innovative technique
- To describe a process by which bacteria can be trained to mutate
- To present the results of an experiment designed to test an established theory
- To argue against an established protocol on the grounds that it is outdated
- To challenge a scientific technique used to prove a questionable theory

27. It can be inferred from the passage that the replica plating method is effective for which of the following reasons?

- It allows researchers to determine the relative sizes of different populations of bacteria.
- It shows that no new mutant strains developed after transfer from the original agar plate.
- It eliminates the possibility that the agar culture was contaminated by a different type of bacteria.
- It demonstrates that no tryptophan was present in the original agar culture.
- It establishes that the original agar culture contained the necessary

28. According to the passage, Fildes and Whitaker conducted the experiment with liquid culture because

- agar culture contained tryptophan
- liquid culture allowed for easier plating
- agar culture could not support a sufficiently large number of bacteria
- liquid culture offered a more consistent medium

- agar culture did not adhere well to pile fabric

29. The more people that move to western states, which is an already overburdened ecosystem, the more pressure on water resources becomes increasingly great, eventually requiring the diversion of major rivers and the construction of dams.

- The more people that move to western states, which is an already overburdened ecosystem, the more pressure on water resources becomes increasingly great
- The more that people move to western states, which is an already overburdened ecosystem, the greater the pressure is on water resources
- With more people moving to western states, an already overburdened ecosystem, the more pressure on water resources becomes increasingly great
- The more that people move to western states, an already overburdened ecosystem, the greater the pressure on water resources becomes
- The more people move to western states, which are already an overburdened ecosystem, the greater the pressure on water resources becomes

30. Though it had about 11 inches of snow, aviation officials said conditions on the runway at the time of the emergency landing was acceptable.

- aviation officials said conditions on the runway at the time of the emergency landing was acceptable
- the runway conditions during the emergency landing were acceptable according to aviation officials
- according to aviation officials, the runway was in acceptable condition during the time of the emergency landing
- the runway was said by aviation officials to be in acceptable condition during the emergency landing
- aviation officials said that conditions on the runway at the time of the emergency landing were acceptable

31. Unlike lions and tigers, whose hyoid bones vibrate loosely to create their trademark roars, the hyoid bones of domestic felines do not move and so housecats cannot roar.

- whose hyoid bones vibrate loosely to create their trademark roars, the hyoid bones of domestic felines
- whose hyoid bones vibrate loosely to create the cats' trademark roars, domestic felines have hyoid bones that
- whose hyoid bones vibrate loosely to create the cats' trademark roars, the hyoid bones of domestic felines
- who have hyoid bones that vibrate loosely to create their trademark roars, domestic felines have hyoid bones that
- which have loosely vibrating hyoid bones that create their trademark roars, domestic felines have hyoid bones that

32. Every year many people become ill because of airborne mold spores in their homes. After someone becomes ill, specialists are often hired to eradicate the mold. These specialists look in damp areas of the house, since mold is almost always found in places where there is substantial moisture. If one wishes to avoid mold poisoning, then, one should make sure to keep all internal plumbing in good condition to prevent leakage that could serve as a breeding ground for mold.

Which of the following is an assumption on which the argument depends?

- Mold itself does not create moisture.
- Most homeowners know enough about plumbing to determine whether theirs is in good condition.
- Mold cannot grow in dry areas.
- No varieties of mold are harmless.
- Mold spores cannot be filtered from the air.

33. The new heart scans offer patients significant benefits. They can be completed in a fraction of the time required for an angiogram, with no recovery time necessary. Furthermore, the scans are more sensitive and can identify problem areas that an angiogram might not perceive. However, heart scans use more radiation than most diagnostic procedures, and can cause undue concern over and

treatment for the harmless abnormalities often picked up by such sensitive technology.

Which of the following conclusions is best supported by the statements above?

- A heart scan is safer than an angiogram procedure.
- Patients should not be concerned about heart abnormalities that appear in a heart scan.
- A heart scan could result in indirect harm by causing a patient to undergo risky, unnecessary procedures.
- An angiogram is the more appropriate of the two procedures for most patients.
- The heart scan is a more expensive procedure than the angiogram.

34. To prevent overcrowding, last month the town zoning board limited the number of new buildings that can be constructed in the town in any given year. The board claims that doing so will preserve open spaces and lessen the strain on municipal resources such as schools and garbage disposal. Critics of the changes argue that the plan will harm the community or, at the very least, will fail in its purpose.

Which of the following most supports the claims of the critics of the plan?

- Other towns have had mixed success with similar zoning plans.
- No new schools have been built in the town in ten years.
- Property taxes in the town are higher than in neighboring towns.
- Under the new plan, developers may still erect apartment buildings.
- The nearest garbage dump is several miles away from the town.

35. The current administration and Congress have once again practiced bad public policy in failing to increase Pell grants or at least limit their reduction for next year's budget. Pell grants improve access to higher education for those who have historically been disadvantaged in our society by financial or other life circumstances,

thereby helping recipients elevate themselves to the middle class. Without that access, the gap between the rich and poor in this country will continue to widen, increasingly straining the stability of our democracy.

Which of the following, if true, most seriously weakens the conclusion of this argument?

- Total spending on programs targeted at improving access to higher education for disadvantaged students will increase in next year's federal budget.
- The neediest candidates for Pell grants often lack information about their eligibility for such grants.
- Congress recently authorized a bill that will increase after-school programs in urban communities.
- On average, an individual Pell grant funds less than 15% of the full cost of attending a four-year college or university.
- Federal spending on education for next year will increase as a percentage of the total budget.

One often hears that biographies are autobiographies, that the biographer is always writing about himself. On the contrary, serious biographers seek and welcome the unfamiliar, however troublesome to account for. Ron Chernow, the author of rich biographies of the American businessmen J.P. Morgan and John D. Rockefeller, remarks that biographers "like to stub their toes on hard, uncomfortable facts strewn in their paths." Such encounters with the unaccountable are opportunities for breaking out and breaking through, in new directions, to fresh understanding.

One also often hears that biographers must like their subjects. That would of course rule out such vastly important subjects as Hitler or Stalin. In practice, the biographer must like the subject not as a person but *as a subject*. Some are good subjects for the author, some bad. And what makes one subject better than another for any particular biographer varies dramatically. Some of the reasons are purely practical. Does the subject need a biography? Are the materials available? How much time is needed? A biographer's knowledge and ability also determine the choice. Great scientists are great subjects, but can one write about their

matter, too. Biographers tend to be attracted to subjects who display particular personality traits, whether they be ambition, cruelty, ingenuity, or any other characteristic that separates a potential subject from the multitudes.

In choosing a subject, the biographer's main question should be, Can an effective book be made out of this person's life? Day after day for years, the biographer will be trying to untangle chronology, compress relationships without distorting them, keep the main narrative clear while carrying forward several intricate strands of the subject's life. What pushes most biographers on in this endeavor is not necessarily affection for the subject but the feeling that they are writing a good book.

36. It can be inferred that the author makes which of the following assumptions about biographies?

- Their main purpose is to inform readers about key aspects of the subjects' personalities.
- Only subjects who share traits with biographers make good subjects for biographies.
- Compelling biographies cannot be written about ordinary citizens.
- The biographer's credibility with readers is a factor in the critical success of a biography.
- Practical considerations are most important in the selection of a subject for a biography.

37. The author is primarily concerned with

- advocating a new approach to an established field of study
- defending a discipline against unwarranted critique
- arguing against continued reform of an historical endeavor
- refuting an outdated theory of a certain subgenre
- describing a working method of certain authors

38. The author mentions Ron Chernow most probably in order to

- provide a counterexample to a general claim about biography
- illustrate a questionable assertion regarding biography

- illustrate a questionable assertion regarding establish a favorable comparison with an established biographer
- underscore the importance of research in biography
- challenge a new approach to biography

39. The amount of car accidents caused by faulty brakes, like accidents caused by faulty wiring, has increased significantly since regulations on manufacturing have been relaxed.

- The amount of car accidents caused by faulty brakes, like accidents caused by faulty wiring, has increased significantly since regulations on manufacturing have been relaxed.
- The amount of car accidents caused by faulty brakes, like those caused by faulty wiring, have increased significantly since regulations on manufacturing were relaxed.
- The number of car accidents caused by faulty brakes, like the number caused by faulty wiring, have increased significantly since regulations on manufacturing were relaxed.
- The number of car accidents caused by faulty brakes, like accidents caused by faulty wiring, has increased significantly since regulations on manufacturing had been relaxed.
- The number of car accidents caused by faulty brakes, like the number caused by faulty wiring, has increased significantly since regulations on manufacturing were relaxed.

40. With an emphasis on color and form at the expense of exact duplication of detail, art historians have suggested that Impressionism had evolved in response to the advent of black-and-white photography, which allowed precise, albeit monochromatic, pictorial reproduction of a landscape.

- With an emphasis on color and form at the expense of exact duplication of detail, art historians have suggested that Impressionism had evolved
- Emphasizing color and form at the expense of exact duplication of detail, it has been suggested by art historians that Impressionism evolved
- Art historians have suggested that Impressionism, with its emphasis on color and form at the expense of exact duplication of detail, had evolved

- Art historians have suggested that Impressionism, with its emphasis on color and form at the expense of exact duplication of detail, evolved
- Impressionism, with its emphasis on color and form at the expense of exact duplication of detail, was suggested by art historians to have evolved

41. In the wake of several serious cases of mercury poisoning caused by tainted fish, the state government ordered that all lakes and streams should be tested for mercury levels.

- all lakes and streams should be tested for mercury levels
- all lakes and streams should have their mercury levels tested
- the mercury levels be tested for all lakes and streams
- the mercury levels of all lakes and streams should be tested
- the mercury levels of all lakes and streams be tested

End of Exam

Congratulations, you have completed this exam or question bank!