SAT Practice Test #1

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

**Excerpt:**

With the rising cost of education in the form of college tuition, training courses and vocational programs, the competition for scholarships and financial aid is rapidly increasing. Many college financial aid offices are assisting students from historically high income brackets. Furthermore, scholarship programs are seeing unprecedented levels of interested applicants. The challenge facing these institutions is whether to award aid based on how accomplished the applicant is or how difficult it will be for the student to afford the education.

**Assignment:**

Is it better to financially reward individuals like students and employees based on how much merit the individual demonstrates instead of how much need the individual has? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

*Essay responses will vary. Consult INeedAPencil for advice on essay grading in order to improve your skills.*
SECTION 2: MATH

Directions: For this section solve each problem and select the best answer choice. Fill in the corresponding circle on the answer sheet. You may use any available space for scratchwork.

1. If \( x + 1 \) is an odd integer, which amount must be an even integer?

A. \(-x\)  
B. \(x^2 + 1\)  
C. \(-x^2 + 1\)  
D. \(x + 3\)  
E. \(x - 1\)

**Answer Explanations:**

From the question, we can determine that \( x \) is an even integer, because even and odd numbers are 1 apart. We do not have the choice \( x \), but \(-x\) is also an even integer (choice A).

A. Correct
B. The square of an even number is always even, so adding 1 makes the number odd.
C. See B.
D. This is always an odd integer. E. This is always an odd integer.

2. If 60% of \( m \) equals \( n \), 60% of 6\( m \) is equal to which of the following in terms of \( n \) ?

A. \( n/60 \)  
B. \( n/6 \)  
C. \( n \)  
D. 6\( n \)  
E. 36\( n \)

**Answer Explanations:**

The basic equation in the first sentence is \( 0.6m = n \). If we multiply 60% by 6\( m \), we get 3.6\( m \). To get 3.6\( m \) in the basic equation, we have to multiply both sides by 6. This gives us \( 3.6m = 6n \). Therefore, 6\( n \) is our answer (choice D).

A. This is not equal to 60% of 6\( m \), which is 3.6\( m \).
B. This is not equal to 60% of 6\( m \).
C. This is also not equal to 60% of 6\( m \).
D. Correct
E. This response is the result of an incorrect decimal.
3. Two people, John and Mary, are 200 miles apart and leave at the same time to meet. They are driving towards each other at constant rates on the same straight road. John is traveling at 45 miles per hour, and Mary is traveling at 35 miles per hour. When they meet, how many miles will they be from John’s house?

A. 200
B. 112.5
C. 87.5
D. 101.25
E. 78.75

**Answer Explanations:**
Ah – a distance problem! We can model this using the distance formula $45t + 35t = 200$. This is derived from the distance formula $d = rt$ (where $d$ is the distance, $r$ is the rate, and $t$ is the time). We are doing this because both John and Mary are leaving at the same time, and therefore, $t$ for both of them is the same. This equation simplifies to $80t = 200$, so $t = 2.5$ hours. John’s mileage is $2.5$ hours $\times 45$ miles per hour $= 112.5$ miles (response B).

A. This is the total number of miles that both have to travel.
B. Correct
C. This is how far Mary travels.
D. This is an incorrect calculation of the time it takes to meet: $2.25$ hours. This would incorrectly lead to John’s mileage of $90 + 11.25 = 101.25$.
E. This is an incorrect calculation of the time it takes to meet: $2.25$ hours. This response is an incorrect calculation of Mary’s mileage of $70 + 8.75 = 78.75$.

4. If $3x - 10 = 17$, what is the value of $6x + 20$?

A. 9
B. 54
C. 34
D. 47
E. 74

**Answer Explanations:**
For once, this is a straightforward algebra problem! Simplifying the equation, we get $x = 9$. Placing 9 in for $x$ in the expression $6x + 20$, our answer is $6(9) + 20 = 54 + 20 = 74$, which is response E.

A. This is the value of $x$.
B. This equals $6x$.
C. This is $6x - 20$.
D. This is what $3x$ equals plus 20.
E. Correct

Table for Question 5:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Deals Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>35,000</td>
</tr>
<tr>
<td>2002</td>
<td>40,000</td>
</tr>
<tr>
<td>2003</td>
<td>50,000</td>
</tr>
<tr>
<td>2004</td>
<td>70,000</td>
</tr>
<tr>
<td>2005</td>
<td>100,000</td>
</tr>
</tbody>
</table>

5. What two-year period had the greatest percentage increase in real estate deals closed?

A. 2001-2002
B. 2002-2003
C. 2003-2004
D. 2004-2005
E. 2003-2005
SECTION 2: MATH

Answer Explanations:
Even though this is doable, it can take up valuable time because you’re calculating five different percentage changes! When we calculate percentage change, remember to divide by the previous (or original) amount. The percentage changes for the two-year periods are shown below. The largest percentage is that for the period 2004-2005, which is 42 4/7%. This is response D.

A. This is a 14 2/7% increase.
B. This is a 25% increase.
C. This is a 40% increase.
D. Correct
E. 2003-2005 is actually a three-year period, so we can’t get an answer for this one!

6. Greg has a collection of 600 records. If 20% of his records are 45s, and the rest are LPs, how many LPs does he have?

A. 120
B. 480
C. 360
D. 100
E. 270

Answer Explanations:
We can figure out that 100% – 20% = 80% of Greg’s records are LPs, so we will multiply 80% by the total number of records in his collection (600) to get 480. This is answer B. A. This is the number of 45s.
B. Correct
C. This answer is the difference of the number of LPs and the number of 45s.
D. This is 1/6 of his records.
E. This is 45% of his records.

7. The width of a rectangle is twice the length. If the area of the rectangle is 98, what is the width of the rectangle?

A. 7
B. 49
C. 14
D. 42
E. 21

Answer Explanations:
The formula we can use to model this is Area = Length X Width. Since the width is twice the length, we can change this to |X 2l = 98 or 2l^2 = 98.

Then, l^2 = 49, and l = 7. The width is twice 7, so the answer is 14 (choice C).

A. This is the length.
B. This is the square of the length.
C. Correct
D. This is the perimeter of a 7 X 14 rectangle.
E. This is the sum of a length and a width.

8. How many unique solutions satisfy the equation |3x – 2| = |x|?

A. 0
B. 1
C. 2
D. 3
E. 4
**SECTION 2: MATH**

**Answer Explanations:**
This is a tough one! There are four cases here, the amounts inside the absolute value signs could be: 1) both positive, 2) positive and negative, 3) negative and positive, or 4) both negative. We have to set up 4 different equations to accomplish this:

\[ 3x - 2 = x \quad 3x - 2 = -x \]
\[ -3x + 2 = x \quad -3x + 2 = -x \]

Let’s simplify now...

\[ 2x = 2 \quad 4x = 2 \]
\[ -4x = -2 \quad -2x = -2 \]

\[ x = 1 \quad x = \frac{1}{2} \]
\[ x = \frac{1}{2} \quad x = 1 \]

So, we have two unique solutions: \( x = \frac{1}{2} \) and \( x = 1 \). This is response C.

A. There are two unique solutions.
B. See A.
C. Correct
D. This is not possible since there are 4 cases.
E. There are 4 solutions, but two are duplicates.

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Questions 9 and 10 make reference to the following function:

For all real numbers \( x \), \( g(x) = -2x^2 + x - 4 \).

9. What is the value of \( g(-2) \)?
A. 2
B. 6
C. 14
D. -14
E. -2

**Answer Explanations:**
To get \( g(-2) \), all we have to do is place \(-2\) everywhere we see an \( x \) in the function. This means that \( g(-2) = -2(-2)^2 + (-2) - 4 = (-2)(4) - 2 - 4 = -8 - 2 - 4 = -14 \) (response D).

A. The negative was omitted at the beginning.
B. The two negatives were forgotten!
C. The negative was left off the answer.
D. Correct
E. This is an incorrect cancellation of the first and last terms.

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10. What is the value of \( g(1) + g(2) \)?
A. \( g(0) \)
B. \( g(3) \)
C. \( g(1) \)
D. \( g(-1) \)
E. \( g(2) \)

**Answer Explanations:**
Once again, we have to put the requested \( x \) values into the function and match it up with the response that gets the same answer. \( g(1) = -5 \) and \( g(-2) = -14 \), and their sum is \(-19\). If we calculate \( g(3) \), we also get \(-19\). Therefore, \( g(3) \) or response B is correct.

A. The above sum equals \(-19\), but \( g(0) = -4 \).
B. Correct
C. This equals \(-5\).
D. This equals \(-7\).
E. This equals \(-10\).
11. There are 80 players at the varsity baseball tryouts. 5 players are not trying out today due to injuries. 15 players are trying out exclusively to be either a pitcher or a catcher, while 6 players are exclusively trying out to play a fielding position (all positions on the field excluding pitcher and catcher). What is the probability that a player is trying out to be a pitcher or catcher, given that he is trying out to play a field position?

A. 0.9
B. 0.675
C. 0.9
D. 0.1
E. 0.72

**Answer Explanations:**
The correct choice is A. First create a venn-diagram that places 5 in the universe (open space in which elements are not included in either category). This leaves 75 players who are all trying out. 15 are exclusive to the P/C (pitcher/catcher) category while 6 are exclusive to the F (fielding) category. This means that 75-21=54 players overlap. The question asks for probability of one event given another event. Consider the number of players who are trying out for a field position. This is 60, 6 exclusively and 54 trying out for pitcher/catcher also. Out of 60 players, 54 are also trying out for pitcher/catcher. So there is a 54/60 probability that one is trying out to be pitcher/catcher given he is trying out for a fielding position. 60 is a definite, a fact. This is known by the phrase “given.” 54/60 is 0.9 in decimal form as choice A indicates.

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12. What is the midpoint of \( \overline{AB} \)?

A. \((5, 6)\)
B. \((2.5, 3)\)
C. \((1, 5)\)
D. \((4, 1)\)
E. \((3, 2.5)\)
SECTION 2: MATH

Answer Explanations:
Correct answer: B

The coordinates of A and B are (1, 1) and (4, 5)

Using the midpoint formula 
\[ \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right) \]
gives you \( \left( \frac{1+4}{2}, \frac{1+5}{2} \right) \) when you plug in the x-values and y-values. 1 + 4 equals 5, which gives 2.5 when divided. 1 + 5 = 6 which gives 3 when divided.

Incorrect answers:
A: If you just added the x-values and y-values but did not divide each by 2.
B: Correct answer
C, D, E: All 3 of these would be the result of not knowing the midpoint formula or that it needs to be used.

13. What is the midpoint of the segment connecting the x-intercept of the line 3x + 4y = 12 and the point (6, 4)?

A. (5, 2)
B. (2, 5)
C. (10, 6)
D. (1, 2)
E. (2, 1)

Answer Explanations:
Correct answer: A

You need to be able to find the x-intercept of 3x + 4y = 12. To find an x-intercept, get rid of the 4y terms completely. The equation 3y = 12 can be solved to get x = 4.

That means that the x-intercept is (4, 0)

Using the midpoint formula 
\[ \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right) \]
gives you \( \left( \frac{4+6}{2}, \frac{0+4}{2} \right) \) when you plug in the x-values and y-values. 4 + 6 equals 10, which gives 5 when divided. 0 + 4 = 4 which gives 2 when divided.

Incorrect answers:
A: Correct answer
B: Switched x-values and y-values
C: Did not divide by 2
D, E: Did not know to use midpoint formula or how to find x-intercept.

14. What is the slope of a line parallel to 2x + y = 4?

A. 2
B. 4
C. 1
D. –2
E. –4

Answer Explanations:
Correct answer: D

Solving 2x + y = 4 for y gives y = –2x + 4. That means that the slope is –2. Since parallel lines have the same slope, the answer is –2.
SECTION 2: MATH

Incorrect answers:

A: Did not solve for y; just took coefficient of x as slope
B: Used y-intercept as slope
C: Used coefficient of y as slope
D: Correct answer
E: Used y-intercept as slope

15. What is the length of \( AB \) to the nearest hundredth?

The distance formula is
\[
d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}
\]
When you plug in the x- and y-values, you get
\[
d = \sqrt{(2 - (-3))^2 + (-1 - 2)^2}
\]
Simplifying gives
\[
d = \sqrt{(5)^2 + (-3)^2}
\]
Then you get
\[
d = \sqrt{25 + 9} = \sqrt{34}
\]
The answer is \( d = \sqrt{34} \) which is approximately 5.83. Incorrect answers could result from adding, subtracting, or squaring incorrectly.

16. Which pair of points form a transversal?

A transversal is a segment that connects two parallel lines. The only segment that connects parallel lines is segment AD. Therefore, A and D are the points that form the transversal.

Answer Explanations:
Correct answer: E

The coordinates of A are \((-3, 2)\). The coordinates of B are \((2, -1)\).
SECTION 2: MATH

17. What effect would \( y = (x + 1)^2 \) have on the graph of \( y = x^2 \)?

- A. Shift up 1 unit
- B. Shift down 1 unit
- C. Shift left 1 unit
- D. Shift right 1 unit
- E. No effect

**Answer Explanations:**
Correct answer: C

The fact that the +1 is inside the parentheses with the \( x \) is the most important thing. That tells you that the +1 is directly affecting the \( x \), which lets you know that it has to be a left or right shift (since \( x \)-values are horizontal – left or right – values in the first place).

The trick is to know that anything that changes the \( x \)-value like this does the opposite of what you’d expect. Since it is a +1, that means it goes to the left. This is simply something that needs to be memorized.

By the way, if it was \( x - 1 \) in the parentheses, the graph would shift to the right.

18. You got the following scores on 3 tests: 84, 82, 98. What score must you get on the 4th test if you want to average a 90% for the 4 tests?

- A. 94
- B. 95
- C. 96
- D. 97
- E. 98

**Answer Explanations:**
Correct answer: C

The first three scores add up to 264.

In order to average 90% for the 4 tests combined, you must get \( 4 \times 90 = 360 \) points total.

The score on the 4th test must bring you from 264 points to 360. Find this by subtracting \( 360 - 264 = 96 \).

19. A company did an analysis of its production facility and came up with the following data relating the number of mistakes and the number of days that had that many mistakes occur.

On how many days were one or two mistakes made?

- A. 3
- B. 5
- C. 7
- D. 10
- E. 12
**SECTION 2: MATH**

**Answer Explanations:**

Correct answer: **D**

The first two bars represent the times when one or two mistakes were made. From the graph, you can read that 3 days had 1 mistake and 7 days had 2 mistakes made.

Therefore, there were 10 days total that had one or two mistakes.

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20. A dartboard is made from one large circle with a smaller, shaded, circle in the middle. The larger circle has a radius of 2 ft. The smaller, shaded, circle has a diameter of 2 ft. If a dart is thrown at the board, what is the probability that it will land in the shaded region?

A. \( \frac{\pi}{4} \)
B. \( \frac{1}{4} \)
C. \( \frac{1}{2\pi} \)
D. \( \frac{1}{8} \)
E. \( \frac{1}{8} \)

**Answer Explanations:**

Correct answer: **B**

To do this problem, we need to find the area of both circles.

The formula for area is \( A = \pi r^2 \)

For the larger circle: \( r = 2 \)
So, we have \( A = \pi (2^2) = 4\pi \)

For the larger circle: The diameter = 2, so the radius = 1 (\( r = 1 \))
So we have \( A = \pi (1^2) = 1\pi \)

To find the probability, divide the shaded area by the whole area.

So, we have \( \frac{\text{shaded}}{\text{whole}} = \frac{1\pi}{4\pi} = \frac{1}{4} \).
SECTION 3: CRITICAL READING

Directions: Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

1. When Alex toured the historic sites and -------- castles across Europe, he was speechless and now relies on his vivid photographs to provide the amazing descriptions.

A. downtrodden
B. sublime
C. ancient
D. behemoth
E. diverse

Because Alex was “speechless” and the castles deserve “amazing descriptions” the castles must have been incredibly impressive. “Downtrodden” is a negative term that would not be impressive. Although old, large and varied (choices C, D and E) castles could leave one speechless, choice B. sublime captures the awe-inspiring and impressive nature of the castles.

2. When Travis was trapped in the auditorium listening to his high school’s administrator discuss the --- ----- policies about the school parking procedures, safety concerns and disciplinary system, he effortlessly fell asleep.

A. vapid
B. critical
C. useless
D. precautionary
E. new

You must see that the key hints in this sentence are “trapped,” the list of topics and “fell asleep.” It sounds like Travis was stuck in a rather boring assembly. Therefore, the missing word should imply a lack of liveliness. The policies might be critical from the administrator’s perspective or useless from Travis’ perspective, but based on the clues, the most appropriate term is vapid, which means “lacking animation or interest.” Although you may not even know what some words mean, the clues and a logical process of elimination allows you to eliminate all choices except A. vapid.

3. After only two months in captivity under the watch of feline experts, it is no surprise that the rare cat regressed to its -------- behavior upon initial release back into the open.

A. aggressive
B. tamed
C. feral
D. fretful
E. skilled

Your clues in this sentence are “only two months in captivity” and “regressed.” Clearly this sentence is implying that the animal is not acting like a domesticated animal but rather a wild beast because the impact of captivity has not yet taken effect. Therefore, choice C. feral, which means “existing or having returned to an untamed state” is correct. There is no evidence that the cat is aggressive, nervous (fretful) or any of the other choices except untamed because of the clues you are given.
SECTION 3: CRITICAL READING

4. It always makes for a memorable and amusing moment when the script used for a live television show contains errors that the proofreaders failed to ------- before the final release.

A. maintain
B. make
C. expunge
D. worsen
E. restore

Clearly the error needed to be eliminated because live television is not intended to be amusing because of script error. To maintain, make, worsen or restore an error would not solve any problems. The proofreaders failed to (they did not) expunge, or eliminate, the errors that led to the memorable moment. Choice C is correct.

6. After months of rigorous preparation for the championship basketball game, Drew felt ------- from his ------- wrist injury that kept him out of the game.

A. invigorated…untimely
B. jaded…debilitating
C. disadvantaged…fortunate
D. ambivalent…fortuitous
E. inspired…convoluted

Because Drew was injured after months of preparation, he must feel terribly worn out and frustrated to not be playing in the championship game. Consider a word that means “tired, wearied” for the first blank. In the second blank, you must figure out how to describe an injury that keeps you out of a game and limits your skills. Choice B satisfies these conditions because “jaded” means “to be worn out” and “debilitating” means “to sap the energy out of.”

5. Sean’s decision to ------- his savings to a financial manager to provide for a comfy retirement instead of blowing all the money he earned from his new job on luxuries proved that he had finally grown into a prudent and ------- man.

A. shift…stingy
B. transfer…economic
C. entrust…paranoid
D. consign…sagacious
E. devote…hard working

Sean made a decision to invest wisely by giving his savings to a financial manager instead of “managing” (i.e. spending) the money himself. You know he is placing the money with the manager because he is focused on his retirement, but since the funds had no point of origin, the funds could not be shifted or transferred. In the second blank you must find a word that means “wise” based on the nature of Sean’s decision. Only sagacious, which does in fact mean wise, satisfies this condition. Choice D is correct.
SECTION 3: CRITICAL READING

7. Although many of the doctors in the hospital were ------- by the patient’s curious illness, a bold nurse stepped forward with the correct -------.

A. intrigued…diagnosis
B. confused…occupation
C. frightened…symptom
D. dumbfounded…quandary
E. stymied…assessment

Because the illness was “curious,” or strange, it is likely the doctors were stumped and this would make the nurse “bold” for stepping forward with the solution. Therefore, the first blank demands a word synonymous with “stumped” such as “confused,” “dumbfounded,” and “stymied.” Then make sure the second word matches the necessary meaning. Choice B implies that the nurse came forward with a job or task, while choice C implies that the nurse suggested the correct problem, which is the opposite of a solution. Choice E is correct as “stymied” means confused and a nurse with a solution could be providing her assessment of the situation.

8. With the proper water and sunlight exposure, your flowers will begin to --- ------ and you can be proud of the original beauty that your hard work and methodology ---------.

A. blossom…destroyed
B. wither…created
C. spread…changed
D. grow…ruined
E. burgeon…engendered

Clearly water and sunlight will cause plants to blossom and grow, so the first blank should satisfy that condition. In the second blank, you need a word that means “created” because obviously the reference to hard work and methodology (water/sunlight) is indicating what created the natural beauty. Choice E matches these conditions because burgeon means “to blossom” and to engender means “to create.” The incorrect choices in this question misunderstand the relationship between the planting process and the development of the flowers.
SECTION 3: CRITICAL READING

The passages below are followed by questions based on their content; questions following a pair of related passages may also be based on the relationship between the paired passages. Answer the questions on the basis of what is stated or implied in the passages and in any introductory material that may be provided.

**Passage 1**

Cities across the world are essentially blends of smaller cultural environments that lead people to have vastly different experiences. Each city typically contains a broad spectrum of dining establishments along with various art institutions like museums and theatres. Yet with all these blends of dining, art and night lives, what is the one characteristic that can distinguish a city? History. The undeniably unique history of each city provides rich traditions and a bond between the local people that overshadows any other city’s mélange of dining and art institutions.

9. In context, which word most closely defines mélange?

A. history
B. tradition
C. assortment
D. opportunity
E. brochure

The author selects words such as “spectrum” and “various” to refer to the dining and art institutions. Clearly mélange must be some sort of variety offering. Only choice C, “assortment” matches this definition.

10. Which of the following would the author believe is the most important city attraction or characteristic?

A. The exquisite French restaurant in the European district
B. The Museum of Natural History
C. Ruins from the Berlin Wall and the local community
D. Wrigley Field
E. A democratic government

The author clearly believes true, genuine history to be the paramount characteristic. Choice A and choice B (restaurant and museum) are exactly what the author said weren’t as important as history (choice B is tricky, but it is still just a museum—not natural history in its element). Choice D refers to sports, despite the fact that Wrigley Field has much history tied to it; choice E is irrelevant as government is not nearly as important to a city’s cultural wealth as a historical monument. Choice C is a historical object and symbol; furthermore, the author refers to the local people that add to the cultural vibrancy. Choice C is the best option.
Passage 2
Swimming has developed from a primal mode of movement to an advanced hobby and competitive sport. Exercising nearly every muscle group, swimming is a rigorous sport and requires intense training. In competitions swimmers typically contend for the fastest time to complete a certain distance by performing a specific swimming stroke. Also, swimmers work to build endurance and an ability to swim over long distances. Because swimming has developed into a highly intricate competitive sport, where one wrong technique can disqualify a participant, it is interesting to ponder how the sport will evolve for people in the future, either advancing into a progressive purpose or regressing to a primal mode of movement.

11. The structure of this passage could be best described in what way?

A. An activity narrowed to a specific purpose and expanded to consider future implications.
B. An activity narrowed to a specific purpose and expanded to consider future deviations.
C. A hypothesis tested against certain conditions, developed into a larger thesis.
D. An activity and its purposes are explained.
E. A supposition regarding the prospect of an activity, analyzed for viability

The passage begins by introducing swimming, narrowing it down to competitive sports and then expanding the concept to figure out what swimming will turn into in the future. Choice A and choice B are close in meaning, but choice A refers to implications, or effects, rather than deviations, or different versions resulting from changes. This minor change separates the two choices and makes B superior. Choice D is relevant, but it does not include the entire scope of the passage. Choice E only focuses on the conclusion and stretches beyond what the passage actually accomplishes. Choice B is best.

12. Which of the following situations would fulfill the author’s prophecy for swimming?

A. Humans settling on the moon use swimming techniques to move through space.
B. Swimming remains a competitive Olympic sport.
C. Animals, including amphibians, begin to swim instinctively upon birth, as a dominant genetic trait.
D. People swim in home and community pools to relax and exercise.
E. Fish begin swimming at unprecedented speeds and extend the average life span.

This question refers you to the conclusion sentence. The author states clearly that swimming must either progress into a new form or regress to the primal mode of movement. Choice B and D can be eliminated because they show no change, just a continuation of current circumstances. Choice A is an actual possibility as humans may very well be settling in outer space in the
future. Choice C and E refer to animals anyway, when the author specifically was predicting a future for humans. Choice A is the most realistic and relevant prophecy according to the premises developed by the author.

The following is an excerpt from a compilation of fables published by Thomas Bulfinch during the 19th century.

Prometheus was one of the Titans, a gigantic race, who inhabited the earth before the creation of man. To him and his brother Epimetheus was committed the office of making man, and providing him and all other animals with the faculties necessary for their preservation. Epimetheus undertook to do this, and Prometheus was to overlook his work, when it was done. Epimetheus accordingly proceeded to bestow upon the different animals the various gifts of courage, strength, swiftness, sagacity; wings to one, claws to another, a shelly covering to a third, etc. But when man came to be provided for, who was to be superior to all other animals, Epimetheus had been so prodigal of his resources that he had nothing left to bestow upon him. In his perplexity he resorted to his brother Prometheus, who, with the aid of Minerva, went up to heaven, and lighted his torch at the chariot of the sun, and brought down fire to man. With this gift man was more than a match for all other animals. It enabled him to make weapons wherewith to subdue them; tools with which to cultivate the earth; to warm his dwelling, so as to be comparatively independent of climate; and finally to introduce the arts and to coin money, the means of trade and commerce. Woman was not yet made. The story (absurd enough!) is that Jupiter made her, and sent her to Prometheus and his brother, to punish them for their presumption in stealing fire from heaven; and man, for accepting the gift. The first woman was named Pandora. She was made in heaven, every god contributing something to perfect her. Venus gave her beauty, Mercury persuasion, Apollo music, etc. Thus equipped, she was conveyed to earth, and presented to Epimetheus, who gladly accepted her, though cautioned by his brother to beware of Jupiter and his gifts. Epimetheus had in his house a jar, in which were kept certain noxious articles, for which, in fitting man for his new abode, he had had no occasion. Pandora was seized with an eager curiosity to know what this jar contained; and one day she slipped off the cover and looked in. Forthwith there escaped a multitude of plagues for hapless man,--such as gout, rheumatism, and colic for his body, and envy, spite, and revenge for his mind,--and scattered themselves far and wide. Pandora hastened to replace the lid! but, alas! the whole contents of the jar had escaped, one thing only excepted, which lay at the bottom, and that was HOPE. So we see at this day, whatever evils are abroad, hope never entirely leaves us; and while we have THAT, no amount of other
ills can make us completely wretched.

Another story is that Pandora was sent in good faith, by Jupiter, to bless man; that she was furnished with a box, containing her marriage presents, into which every god had put some blessing. She opened the box incautiously, and the blessings all escaped, HOPE only excepted. This story seems more probable than the former; for how could HOPE, so precious a jewel as it is, have been kept in a jar full of all manner of evils, as in the former statement?

13. Epimetheus, in his creation of all animals before man, could best be described as

A. benevolent
B. impetuous
C. meticulous
D. evil
E. responsible

Epimetheus used up all his resources in creating animals besides man, when he knew that man was supposed to be the most superior. Although he had given many qualities to various animals, benevolent (choice A) would imply conscious generosity, and this was not what Epimetheus’ intent. Also, Epimetheus was not meticulous, or careful, because he clearly lost sight of his complete goal. Although he failed before completing his task, Epimetheus did not intend to leave man with no qualities nor was he a conspirator in the Pandora crisis, so he was not evil. Surely, he cannot be called responsible for such an egregious mistake. Unless you knew that impetuous meant to be rash and thoughtless, this process of elimination would make it clear that B is the correct answer.

14. As used in this passage, “prodigal” may mean any of the following terms EXCEPT

A. reckless
B. extravagant
C. improvident
D. wasteful
E. prudent

The denotation (unbiased dictionary definition) of “prodigal” may be any of the first four choices. However, choice E “prudent” is an antonym of “prodigal” because “prudent” means to be cautious or careful (This clearly does not fit in this context, either. Epimetheus was NOT careful.). Choice E is correct.

15. In the context of this story, what is the significance of Prometheus’ audacity?

A. This provides a reason for man to later be endowed with woman.
B. His bravery provides man with fire.
C. The fire creates opportunities for man that no other animals had.
D. With fire, man regained superiority over all animals/
E. Such audacity provoked Jupiter into providing the instrument that would release the world’s evils.
SECTION 3: CRITICAL READING

Choice E is correct. Although in the short term, Prometheus’ bold act of stealing fire from the Titans provided fire and distinguished man from animals, there were greater consequences. Such action directly led to the arrival of a woman, and such an existence led to the opening of the box that would plague mankind. Consider the question’s phrasing: “In the context of this story…” This means that you must not focus too much just on the impact of fire or sin, but what this ultimately resulted in: the release of everything except hope.

16. The primary function of the second paragraph is to

A. provide the reader with a more likely conclusion to the story of Pandora
B. create a contrast in the story about the Pandora so that the reader has an unbiased premise on which he may draw his own conclusions
C. support the claims made in the first paragraph
D. restore Jupiter’s reputation
E. convey a sense of hope for humanity

Choice A is correct. The author even states that this conclusion is more probable (“This story seems more probable than the former…”) and in the first paragraph the author commented on how absurd one proposition was. Choice B is incorrect because the author certainly is biased by commenting on probability. Choice C is incorrect because the second paragraph presents different ideas than the first paragraph. Choice D is wrong because the author’s main focus is to discuss Pandora, humanity and hope, while E is a shared characteristic of both passages. Choice A is the best-supported option.

17. The passage states that the Titans created animals to

A. provide an additional source of resources to sustain their race
B. allow the animals existence and protection on earth
C. supersede man in power
D. suffer from evils in the world
E. to provide man with a subservient entity

The passage states that Epimetheus and Prometheus were supposed to be “…providing…animals with the faculties necessary for their preservation.” Therefore, it can understood that the Titans did not have predatory intentions for the animals. Eliminate A and D. Also, man was meant to be superior to animals so choice C is wrong. Now the tough choice…B or E? The passage states animals were to be given “faculties necessary for their preservation.” Therefore, it makes sense that the Titans would protect the animals, making B a better choice than E. Furthermore, if E were true, than it is less likely that Epimetheus would blatantly stray from his goal like he did. Choice B is correct.
SECTION 3: CRITICAL READING

18. All of the following choices demonstrate how the author created Prometheus as the dominant brother of Epimetheus EXCEPT

A. Prometheus was introduced first in the story.
B. Epimetheus made the hasty mistake of not providing for man
C. In his moment of perplexity, Epimetheus turned to his brother Prometheus
D. Upon her completion, the woman was conveyed to Epimetheus
E. Prometheus daringly ventured to heaven, stole from the sun and brought fire down to man

Clearly by his more prominent introduction (eliminate A) and Epimetheus' bonehead mistake (eliminate B), it seems like Prometheus is the more dominant brother. To strengthen this idea, Epimetheus has to turn to his brother when he is desperate (eliminate C) and Prometheus has the connection, Minerva, and courage to bring fire to earth (eliminate E). Some readers may understand Prometheus to be irresponsible for “stealing fire” but he did not knowingly commit an immoral act and according to the second, more reasonable account, Prometheus was not even guilty of a crime. The fact that the gods trusted Epimetheus enough to send the woman to him and still allow him to handle the matter boosts his status, but does not make Prometheus seem more dominant. Choice D is correct.

19. According to the first paragraph, which character could be considered the greatest victim?

A. Jupiter
B. Man
C. Prometheus
D. Epimetheus
E. Pandora

First denied any positive characteristics because Epimetheus had used them all up and now exposed to maximum evils, man is definitely the greatest victim. Jupiter’s punishment hurt man, Epimetheus and Prometheus through haste and audacity jeopardized man’s existence and Pandora released all of the evils, according to the first paragraph. Choice B is right.

20. What was the immediate consequence of Prometheus’ daring adventure?

A. Animals were destined to suffer.
B. Man became superior to animals.
C. Prometheus would feel the wrath of Jupiter
D. Blessings were placed in Pandora’s box
E. Woman could now exist

In the passage, the author immediately describes the impact of fire in saying “It enabled him to make weapons wherewith to subdue them; tools with which to cultivate the earth; to warm his dwelling, so as to be comparatively independent of climate; and finally to introduce the arts and to coin money, the means of
trade and commerce.” Although this did render animals inferior, animals were not “destined to suffer” because the Titans set out to protect the animals and grant them “preservation.” The other choices are either long-term consequences or drawn from other causes. Fire created superior abilities for men according to this passage.

21. Considering the entirety of this passage, which term best describes Jupiter?

A. spiteful  
B. benevolent  
C. iniquitous  
D. powerful  
E. decent

This question can be tricky because you have to draw a single conclusion about Jupiter even though two different sides of this character are presented. The best choice is E, which implies a just, or fair, character. When the fire was stolen, it was fair for Jupiter to administer some form of punishment, even though this was detrimental to man. Jupiter is not spiteful because in paragraph two he offers many blessings, but he is not benevolent because he did not show much mercy in paragraph one (eliminate A and B). Choice C, iniquitous, means evil which does not describe Jupiter in paragraph two and choice D. is not the best selection because it is fairly general and vague. Powerful in what sense? Two Titans were here making creatures; that’s power. Animals had “courage, strength, swiftness, sagacity” and that is powerful. Choice E is the most specific and accurate description for Jupiter in the context of this entire passage.

22. The term to best describe the qualities that Pandora was endowed with is

A. pragmatic  
B. abstract  
C. vain  
D. aesthetic  
E. essential

Pandora was given beauty, persuasion, music and other possible qualities like compassion and intuition. These qualities, although they created a “perfect” woman, were ultimately not that practical, or necessary. Is physical beauty the most practical quality? Sure, persuasion is useful, but the gods were much more concerned with creating aesthetic (“of beauty, inventive”) art when they made Pandora. Her qualities cannot be ruled out as abstract because “persuasion” can be a very useful asset. Also, “vain” in this context would mean “useless” but these qualities bordered between beautiful art and practical strategy. Therefore, a choice like D. “aesthetic” is the best as it captures Pandora’s being as it also means “artistic and creative”, and what the Titans were all about when crafting this perfect all-around woman.
SECTION 3: CRITICAL READING

23. The parable that this passage embodies conveys a sentiment of

A. caution
B. optimism
C. revulsion
D. guilt
E. tension

This passage, regardless of which ending you favor, ends with hope. Hope prevails despite evils and errors. Therefore, there is a sense of optimism in knowing that you will never be totally wretched and alone.

24. If given more credibility, which of the following statements from the passage would most significantly weaken the author’s position about this parable?

A. Epimetheus was “cautioned by his brother to beware of Jupiter and his gifts.”
B. “Pandora was seized with an eager curiosity to know what this jar contained…”
C. “…no amount of other ills can make us completely wretched.”
D. The Titan Prometheus “went up to heaven, and lighted his torch at the chariot of the sun.”
E. Man “…was to be superior to all other animals…”

First you must identify the author’s position about this parable. The only way to take a position on such a passage is whether you believe the first story or the second story, evils or blessings. The author makes it clear that he believes the second conclusion based on the fact that he calls the first version ridiculous (“The story [the first version about evils] (absurd enough!”) and claims the second one to be more reasonable (“This story seems more probable than the former…”). So you must decide which choice makes the first paragraph, that claims Jupiter was punishing man, more true if it was supported further (This is an interpretation of “If given more credibility…”). Choice B is wrong because Pandora is curious in both passages; her character is not under question. Choice C is wrong because any strength given to this statement would just strengthen the optimistic sense conveyed by the hope that survived despite evil all around. Choice D is flawed because it is a given that Prometheus stole the fire, but this does not change the character of Jupiter. And this character MUST be changed in order to weaken the author’s argument in favor of the second version about blessings because the author is very defensive about Jupiter being a good natured god. Choice E is wrong because the author does not argue in favor of woman’s superiority or rights for women. Rather he argues that Jupiter would not send evils as punishment, but rather he would send blessings. Choice A is correct because if Jupiter was in fact evil, then it would make sense for Prometheus to warn his brother about the gifts. If there was support around the need for this caution, then Jupiter’s character would come into question and the author’s unwavering support of Jupiter would be questionable.
SECTION 4: EQUATING (SKIP THIS!)

ONE SECTION ON EACH SAT IS USED TO TEST OUT FUTURE QUESTIONS. WE’LL SPARE YOU THAT PLEASURE; CONTINUE WORKING, BUT REMEMBER THAT THE EQUATING SECTION IS NOT LABELED ON THE REAL SAT AND MAY NOT BE SECTION 4!!!
SECTION 5: CRITICAL READING

Directions: Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

1. Authors during the eighteenth century were often --------- folks, who interacted with a variety of people, socializing with whomever they found intriguing.

A. diligent
B. creative
C. gregarious
D. intellectual
E. iniquitous

The clue in this sentence is the clause that describes authors as talkative and social “folks.” Choice C. gregarious is defined as “lively, highly social” and would fit perfectly here. Although authors may be hard working, creative, smart and hopefully NOT iniquitous (evil), the most suitable word here is choice C. gregarious.

2. Wanting to start anew in her construction of a prize-winning card house, Sarah chose to --------- her current house, take a break and try to build it again from scratch.

A. mend
B. dissemble
C. refine
D. dismantle
E. design

It is important to note that Sarah decided to “start anew” and wants to build again “from scratch.” Knowing this, what would she do to her current house? She would want to demolish it and start fresh. She would not mend (fix) or refine it, nor would she design the current house. So would she dissemble or dismantle her house? Although “dissemble” seems like the opposite of assemble, it actually means “to pretend” and Sarah certainly would not “pretend her new house”! Therefore, choice D. dismantle, which means to take apart, is the correct answer.

3. When the island country successfully provided universal healthcare and education for its citizens, it received sincere --------- for achieving an --------- society.

A. criticism…oppressive
B. praise…opportunistic
C. interest…basic
D. concern…isolated
E. adulation…egalitarian

Key words in this sentence are “successfully” and “universal healthcare and education.” Whenever a country “successfully achieves” something, it is likely that the country will be applauded. Also, a society that offers equal services could be considered “egalitarian.” After “sincere,” a positive word such as praise or adulation must follow; ironically they are synonyms. Although the country provided opportunities for its citizens, opportunistic does not mean this; rather, “opportunistic” implies a
tendency to exploit, which is negative. Choice E, which places words that mean “applause” and “equal and just” in the blanks, is correct.

4. Soft drinks are marketed to the public as treats; however, the effects of some drinks on the human body have left many consumers disgruntled.

A. delicious…beneficial
B. innocuous…corroding
C. rare…necessary
D. refreshing…expected
E. unhealthy…detrimental

Clues in this sentence include words such as “marketed,” “treats,” “however,” and effects…disgruntled.” Clearly soft drinks are marketed in a positive light (treats) yet there is a contrasting characteristic that is negative. Soft drinks can be delicious, innocuous or refreshing, but “beneficial” and “expected” do not provide a negative contrast to treats. Treats could be harmless (innocuous), but on the other hand, there are damaging (corroding) effects for most treats. Choice B is correct.

5. By not answering the calls of bill collectors Zoe was her credit card debt and compromising her .

A. decreasing…ethics
B. bilking…integrity
C. reducing…debt
D. augmenting…malice
E. ruining…morals

Zoe was evading, or avoiding, payment of her credit cards by not answering these calls. Such avoidance is known as “bilking” and this certainly compromised, or reduced, her integrity (moral uprightness). Although you may argue that she is augmenting, or increasing, her debt by not answering calls (and letting interest on her payments go up), she would not be compromising, or giving up, her morals. This would imply that avoiding credit card debt makes you a better person (reducing, or giving up, malice is not a result of avoiding debt). Choice B, which completes the sentence with “avoiding payment of” and “morals,” is the best answer.
SECTION 5: CRITICAL READING

Directions: The passages below are followed by questions based on their content; questions following a pair of related passages may also be based on the relationship between the paired passages. Answer the questions on the basis of what is stated or implied in the passages and in any introductory material that may be provided.

Passage 1
Spending and saving money wisely is an important skill for teenagers to learn. By learning financial responsibility at a young age, teenagers will preparedly transition into the daunting world of bank accounts and credit cards. With an advanced understanding of APRs (Annual Percentage Rates) and annual fees, individuals can avoid common pitfalls by misallocating funds or suffering from unnecessary charges. Also, by taking hold of credit early, individuals can build up strong credit records for financing major purchases in the future. Moreover, self-esteem develops significantly when teenagers effectively manage their own money.

Passage 2
Teenagers have the opportunity to develop their financial independence while still in high school. By opening a personal savings account with the local bank, one can begin to put money away for the future and establish a financial record. Also it is convenient to us a debit card connected with your bank account. Next one can apply and begin to use a credit card with a minimal credit line. By making small purchases and consistently making payments on time, individuals will begin to see improvements in their credit score. Nevertheless, one must be prudent before taking any of these measures in order to avoid financial scams, credit card fraud or personal debt. Another educational and possibly lucrative method of financial involvement is through investment in forms such as stocks and bonds.

6. It can be inferred from Passage 1 that

A. financial services companies intend to deceive clients, especially young adults.
B. teenagers do not have the skills to be financially independent.
C. the financial realm is challenging and involves high stakes.
D. financial responsibility is difficult when individuals are older.
E. becoming involved in financial matters early guarantees success.

Passage 1 discusses the benefits of becoming actively involved in personal finances as a young adult. Remember that correct choices must be supported by solid text evidence. Although certain people may perceive financial services companies as deceptive, the author does not intend to discuss financial services companies’ honesty. The author mentions pitfalls, but each pitfall (1. misallocating funds 2. unnecessary charges) is a result of the individual’s own decisions. If the author had mentioned, for example, “hidden charges” or “overly aggressive sales representatives” then one could shift the blame past the individual, but this is not the case. With choice A eliminated, one moves to a clear wrong choice with B. The author is encouraging teenagers to be financially independent, and although some
SECTION 5: CRITICAL READING

teenagers do not have the necessary skills, the author does not focus on the lack of abilities. Choice D is tricky because you must know where to draw the line. Although it is advantageous to learn early on in order to avoid unnecessary headaches, the author does not say it is especially more difficult to learn financial independence when you're older. In choice E, notice that the choice includes the word “guarantees.” Whenever the SAT includes an absolute word such as "guarantees," "always," "never," etc. then the choice is almost always wrong. The author does not attach a significant relationship between opening a bank account and "winning in life." Choice C is correct because it matches the author’s concern for finances and is the essential reason for writing this passage.

7. Which of the following actions would most likely be supported by both authors?

I. Opening and saving money in a Roth IRA
II. Using multiple credit cards for all your purchases to increase credit involvement
III. Purchasing penny stocks that can return high dividends through high volumes

A. I only
B. II only
C. III only
D. I and III
E. I, II and III

The authors encourage prudent financial involvement; you must take things slowly. Therefore, the authors would support saving money as described in part I; however, choice II indicates too much involvement (and therefore too much risk) while choice III encourages significant involvement in risky stocks (don’t be fooled by “penny” which doesn’t). Choice A is correct.

8. Both of the passages support which of the following statements about financial responsibility?

A. Early involvement in finances can lead to significant debt and money problems
B. Financial responsibility instills self-esteem in teenagers
C. Financial services companies have many intricate policies and products
D. Teenagers should be active in developing financial responsibility and not depend on parents
E. Financial responsibility demands a gradual learning process

Choice D is best because Passage 1 describes the benefits of financial responsibility (“…an important skill for teenagers to learn”) while Passage 2 details the ways to support this concept (“Teenagers have the opportunity to develop their financial independence…”). The other choices either: only have strong references in one passage (choice A, B), do not pertain directly to financial responsibility (choice C) or make a claim without substantial text evidence that stretches beyond its scope and is not the best
representation of the total message (choice E). Choice D is best as it conveys the general message while “independence” and the absence of referring to parents emphasizes this lack of dependence.

9. The statement made about “financial scams, credit card fraud or personal debt” in Passage serves to

A. deter individuals from allocating funds in various vehicles.
B. emphasize the dangers of becoming financially independent. C. caution individuals against drowning in credit card debt.
D. educate individuals about the time and patience financial independence requires.
E. slander financial services companies.

The author preceded this list of dangers with an encouragement to become involved in credit card use, so it is responsible for him to follow this recommendation with caution against the greatest danger of credit card use: significant debt. The author encourages diverse allocation (choice A), tries NOT to emphasize dangers because the author favors becoming financially independent (choice B), mentions scams which do not directly relates to educating individuals about patience (choice D) and avoids bad-mouthing companies in favor of stating straightforward facts (choice E). Choose A.
The following is an excerpt from the beginning of “Love among the Chickens,” a novel written by P.G. Wodehouse in England during the early 1900s.

Mr. Jeremy Garnet stood with his back to the empty grate--for the time was summer--watching with a jaundiced eye the removal of his breakfast things. "Mrs. Medley," he said.

"Sir?"

"Would it bore you if I became auto-biographical?"

"Sir?"

"Never mind. I merely wish to sketch for your benefit a portion of my life's history. At eleven o'clock last night I went to bed, and at once sank into a dreamless sleep. About four hours later there was a clattering on the stairs which shook the house like a jelly. It was the gentleman in the top room--I forget his name--returning to roost. He was humming a patriotic song. A little while later there were a couple of loud crashes. He had removed his boots. All this while snatches of the patriotic song came to me through the ceiling of my bedroom. At about four-thirty there was a lull, and I managed to get to sleep again. I wish when you see that gentleman, Mrs. Medley, you would give him my compliments, and ask him if he could shorten his program another night. He might cut out the song, for a start."

"He's a very young gentleman, sir," said Mrs. Medley, in vague defense of her top room.

"And it's highly improbable," said Garnet, "that he will ever grow old, if he repeats his last night's performance. I have no wish to shed blood wantonly, but there are moments when one must lay aside one's personal prejudices, and act for the good of the race. A man who hums patriotic songs at four o'clock in the morning doesn't seem to me to fit into the scheme of universal happiness. So you will mention it to him, won't you?"

"Very well, sir," said Mrs. Medley, placidly.

On the strength of the fact that he wrote for the newspapers and had published two novels, Mrs. Medley regarded Mr. Garnet as an eccentric individual who had to be humored. Whatever he did or said filled her with a mild amusement. She received his daily harangues in the same spirit as that in which a nurse listens to the outpourings of the family baby. She was surprised when he said anything sensible enough for her to understand.
10. According to the passage, what can you infer is Mr. Garnet’s full-time occupation?

A. night watchman
B. magazine editor
C. property owner
D. novelist
E. farmer

Based on the text evidence that “[Mr. Garnet] wrote for the newspapers and had published two novels” it would be most logical to infer that he is a novelist (choice D is correct). Despite the fact that a magazine editor would also need to be an active writer, the passage makes no mention of magazines—just novels and newspapers.

11. Based on Mr. Garnet’s dialogue and Mrs. Medley’s assessment, which of the following best describes Mr. Garnet’s speech style?

A. articulate
B. verbose
C. colloquial
D. curt
E. didactic

In the passage, Mr. Garnet asks Mrs. Medley “Would it bore you if I became auto-biographical?” and goes on to provide a wordy and roundabout explanation of his anguish from the previous night. Mr. Garnet seems to use five words when two will do, and elevate his word choice to appear intellectual. In truth, he is verbose and ambiguous. Mrs. Medley describes his speech as rarely sensible enough for her to understand. Choice B is correct also by process of elimination because his language is not properly sophisticated (eliminate choice A) nor does it take on a condescending teaching voice (eliminate choice E). His speech is not similar to slang or low conversation (eliminate choice C) and he generally is not rude, despite his outburst about a fellow resident (eliminate choice D). Select choice B for a point!

12. The gentleman in the top room commits all of the following grievances that upset Mr. Garnet EXCEPT

A. whistling a patriotic song
B. loudly placing his boots on Mr. Garten's floor
C. disruptively moving upwards past Mr. Garnet’s room
D. producing loud crashes
E. reaching his room around 3 o’clock in the morning

The young man in the top room committed every act listed in the answer choices except for B. loudly placing his boots on Mr. Garten’s floor. Although the young man did notably make loud crashes with his boots, it was on his own floor, or the ceiling of Mr. Garten’s room. Choice D. producing loud crashes was derived from the boots being removed, so it did in fact occur. Choice B is right.
13. What is the author’s purpose for having Mr. Garten instruct Mrs. Medley to give the young man his compliments upon initiating the conversation?

A. to illustrate Mr. Garten’s desire for a companion  
B. to hint at Mr. Garten’s need for a protagonist for his next novel  
C. to characterize Mr. Garten as one who will compromise his principles to achieve an end  
D. to demonstrate Mr. Garten’s kind nature  
E. to adhere to social standards of conversation

Mr. Garten is sending compliments to a man he just indirectly threatened to violently assault, although that threat itself is empty based on Garten’s background. If Mr. Garten was forthright, he would not be kind to a man who wronged him just for the sake of being nice. In order to get the young man to “shorten his program” Mr. Garten thinks that complimenting him first will sweeten the deal and increase the chances that the man will comply with his request. Choice C captures the author’s purpose and shows how this action effectively characterizes Mr. Garten.

14. Based on the surrounding context, what is the closest meaning of “returning to roost?”

A. coming home  
B. going to tend to chickens  
C. fixing up the barn  
D. arriving late  
E. waking up at the crack of dawn

As the gentleman was “clattering on the stairs” and removing his boots once he got back to his room, it can be assumed that he was just climbing up to his room as he came home for the night. After he came home, he logically removed his boots and whistled himself off to sleep. Choice A is correct; do not be fooled by the metaphorical reference of “roost.”

15. The author of this passage primarily characterizes the landlady Mrs. Medley as

A. overbearing.  
B. condescending.  
C. appeasing.  
D. ignorant.  
E. subservient.

Consider the author’s comparison of Mrs. Medley’s humoring of Mr. Garnet as “that in which a nurse listens to the outpourings of the family baby.” Also, by considering Mrs. Medley’s tone (i.e. placidly) and how she addresses Mr. Garnet (i.e. “Sir?”) and his concerns (i.e “Very well.”), it is evident that she looks to keep him happy and more or less give him what he wants, or at least make him believe that. She appeases, or satisfies, his requests, thus choice C is correct.
The following excerpt comes from a mystery called *The Abandoned House* written by Wadsworth Camp.

The night of his grandfather's mysterious death at the Cedars, Bobby Blackburn was, at least until midnight, in New York. He was held there by the unhealthy habits and companionships which recently had angered his grandfather to the point of threatening a disciplinary change in his will. As a consequence he drifted into that strange adventure which later was to surround him with dark shadows and overwhelming doubts.

Before following Bobby through his black experience, however, it is better to know what happened at the Cedars where his cousin, Katherine Perrine was, except for the servants, alone with old Silas Blackburn who seemed apprehensive of some sly approach of disaster.

At twenty Katherine was too young, too light-hearted for this care of her uncle in which she had persisted as an antidote for Bobby's shortcomings. She was never in harmony with the moldy house or its surroundings, bleak, deserted, unfriendly to content.

Bobby and she had frequently urged the old man to give it up, to move, as it were, into the light. He had always answered angrily that his ancestors had lived there since before the Revolution, and that what had been good enough for them was good enough for him. So that night Katherine had to hear alone the sly stalking of death in the house. She told it all to Bobby the next day—what happened, her emotions, the impression made on her by the people who came when it was too late to save Silas Blackburn.

She said, then, that the old man had behaved oddly for several days, as if he were afraid. That night he ate practically no dinner. He couldn't keep still. He wandered from room to room, his tired eyes apparently seeking. Several times she spoke to him.

"What is the matter, Uncle? What worries you?"

He grumbled unintelligibly or failed to answer at all.

She went into the library and tried to read, but the late fall wind swirled mournfully about the house and beat down the chimney, causing the fire to cast disturbing shadows across the walls. Her loneliness, and her nervousness, grew sharper. The restless, shuffling footsteps stimulated her imagination. Perhaps a mental breakdown was responsible for this alteration. She was tempted to ring for Jenkins, the butler, to share her vigil; or for one of the two women servants, now far at the back of the house.
16. Bobby Blackburn stayed in New York because

A. there was an important business meeting that he had to attend the next day.
B. his grandfather was angry with him.
C. he could not resist the allure of alcohol.
D. it was the only place for him to offer protection to his family.
E. he was on vacation.

The author clearly states that “Bobby Blackburn was, at least until midnight, in New York. He was held there by the unhealthy habits and companionships which recently had angered his grandfather…” It is apparent that Bobby stayed in New York (he was held there by) because of unhealthy habits and companionships, which is most likely referring to alcohol, prostitution, gambling and other dark activities one would consider “unhealthy” especially with regard to the setting (i.e. New York). Although alcohol is not explicitly (directly and exclusively) mentioned as the reason for Bobby’s absence from his grandfather’s home in favor of staying in New York, you must draw this information out of the passage and make an inference. Choice C is correct.

17. The mood of this passage can best be described as

A. candid
B. ominous
C. uplifting
D. resentful
E. ambiguous

As the introduction states, this passage is an excerpt from a mystery story. Furthermore, there are numerous references to murder, anger and death. An “ominous” mood indicates a sinister or menacing situation, and based on the use of a deathly tone and terms such as “mysterious death,” “bleak” and “deserted”, you have to realize that this is no happy story. Between ominous and ambiguous, you must know that ominous always carries a darker and more evil connotation, whereas “ambiguous” hints just at the omission of closure, but not necessarily to mystery and death. Choice B is correct.

18. Bobby and Katherine both

A. had something to do with the murder of their grandfather.
B. have driven Silas to take his own life.
C. have fallen into moral traps.
D. appreciate literature and high society.
E. take interest in Silas’ existence.

According to this passage, Katherine was watching over her grandfather (Silas), so she definitely, at least, was interested in her grandfather’s existence. Also the passage includes information about how BOTH Bobby and Katherine encouraged him to move from his dark house while also implying that since Katherine is now Silas’ caretaker, Bobby was likely the previous caretaker. Furthermore, both are together at Silas’ house the day after the murder. Therefore choice E is most correct, regardless of Bobby’s insolence and possible greed.
SECTION 5: CRITICAL READING

19. In context what is the meaning of “content” in the sentence that begins “She was never in harmony…”?

A. substance
B. the internal material
C. the subject matter
D. gaiety
E. tradition

The sentence indicates a lack of harmony between the “bleak, deserted, unfriendly to content” house and Katherine. If something is bleak and unfriendly to content, then the subject of this unfriendly treatment (i.e. content) but be the opposite of bleakness and darkness. Therefore, choice D. gaiety, which indicates a state of joy and happiness, is the appropriate choice. It makes sense that a bleak setting was not in harmony with happiness, or gaiety.

20. Considering that Silas had “behaved oddly” and “grumbled intelligibly”, among other details, indicates that Silas

A. was enduring severe health problems that affected his mind and body.
B. became frustrated over the matter of settling his will.
C. stayed angry at Bobby for his vices.
D. was aware of his impending fate
E. thought Katherine was incapable of caring for him and that the servants were inadequate humans.

Silas at least had an inkling (clue) that death was approaching. The author adds details about he behaved “as if he were afraid.” All of these behaviors and mannerisms are likely to be attached with someone worried about dying soon, as choice D indicates.

21. The significance of the personification used in the sentence that begins “So that night Katherine had to…” is to hear alone the sly stalking of death in the house

A. bring death to life and add tension to the scene.
B. create a new character to add breadth to the mystery.
C. tell grandfather that death is coming soon
D. warn Bobby that he needs to return home soon
E. provide a more complete description of the setting

By personifying death and employing a word such as “stalking”, the author adds more pressure that is surrounding this intense mystery. Therefore, you would be correct for selecting choice A which describes the growing anxiety in the house.
SECTION 5: CRITICAL READING

22. Readers are being exposed to an account of Silas’ death by

A. an omniscient observer
B. Bobby
C. a limited third person
D. Silas
E. a police officer

Based on the fact that the narrator knows virtually every detail about all other characters and can even tell you what will happen in “the future”, it is clear that an all-knowing third person is presenting the facts. However, choice C is wrong because of the “all-knowing” details. Choice A, by using “omniscient,” indicates that the narrator knows all the facts but is not directly involved.

23. Katherine’s treatment of her grandfather most clearly differs from Bobby’s treatment because Bobby is primarily

A. generous
B. daring
C. an older sibling with more responsibilities
D. self-interested
E. upset with his grandfather and seeks isolation

By the early indication that Bobby is involved in materialism through his immorality of habits and the fact that the grandfather considered altering his will, the reader knows that Bobby is an indulgent man who usually just looks out for himself. These facts support the best choice, D. self-interested.

24. The author of this passage would most likely agree that

A. Bobby absolutely disregarded his grandfather and wanted nothing to do with him.
B. Silas was unaware of his imminent doom.
C. Katherine thought that she was well suited to care of her grandfather.
D. the servants were critical for the deteriorating fate of Silas.
E. Family lasts forever and will always be there for you.

Based on the text support it seems like Katherine thought that she could care for Silas better because Bobby was an inadequate person with many shortcomings. Many people would believe Bobby is not as well-suited because of his habits and general disregard for Silas. Choice A is incorrect because Bobby cared for Silas at some point and showed up immediately after the murder. Also, Silas’ behavior indicates that he was aware of his death that loomed up ahead. There is no mention of the servants’ role in Silas’ death and Bobby’s behavior proves that family cannot always be there. Choice C is correct.
SECTION 6: WRITING

Directions: The following sentences test correctness and effectiveness of expression. Part of each sentence or the entire sentence is underlined; beneath each sentence are five ways of phrasing the underlined material. Choice A repeats the original phrasing; the other four choices are different. If you think the original phrasing produces a better sentence than any of the alternatives, select choice A; if not, select one of the other choices. In making your selection, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, sentence construction, and punctuation. Your selection should result in the most effective sentence—clear and precise, without awkwardness or ambiguity.

1. Sally claims that she supports environmentally-conscious businesses and the guidelines that they adhere to.

A. and the guidelines that they adhere to.
B. and the guidelines to which they adhere.
C. and the guidelines they adhere to.
D. and the guidelines they adhere.
E. and the guidelines by which they adhere.

The correct answer is B. The original sentence is incorrect because one generally should not end a sentence with a preposition (i.e. to). This rule allows one to eliminate choices A and C. Choice E is improper as it implies that the proper idiom is “adhere by.” Only choice B is not awkward and corrects the original sentence by removing the preposition from the end of the sentence.

2. Every time Mr. Holland visits the museum with his children he feels terrified when seeing the stairs when he was a child he fell down.

A. the stairs when he was a child he fell down.
B. himself falling down as a child.
C. the stairs down which he fell as a child.
D. the stairs he fell down like a child.
E. himself as a child falling down.

The correct answer is C. The original sentence is incorrect because one generally should not end a sentence with a preposition (i.e. down) as long as it does not cause the sentence to become awkward. Additionally, the original sentence uses awkward arrangement (i.e. the stairs when he was a child he fell down). The preposition rule allows one to eliminate choices A and E. Choice B does not mention the stairs, and by changing the meaning of the sentence it is incorrect. Choice D changes the meaning of the sentence and is therefore incorrect as well. Only choice C correctly removes the preposition from the end of the sentence and the awkward phrasing while retaining the meaning of the original sentence.
3. After all of the customers left, the store manager stayed behind to check the inventory while the cashier separated the dollar bills of the coins.

A. while the cashier separated the dollar bills of the coins.
B. during the time period when the cashier separated dollars bills and coins.
C. while the coins and dollar bills were separated from each other by the cashier.
D. while the cashier separated the dollar bills from the coins.
E. while the cashier separated the dollar bills with the coins.

Choice D correctly uses the proper idiom “separate from” and is not wordy. Choice A uses an incorrect idiom (i.e. separate of). Choice B is wordy and awkward. Choice C uses the correct idiom of “separate from” but it is awkward. Choice E uses the incorrect idiom of “separate with.” Choice D is idiomatically sound and logical.

4. The professor declared that the final exam would separate the men from the boys and the women from the girls.

A. separate the men from the boys and the women from the girls.
B. separate the men and boys and girls and women.
C. separate the men through the boys and the girls through the women.
D. separate: men and boys, women from girls.
E. separate the men and women among the boys and girls.

The correct choice is A. and the original sentence is best as it is written. Choice B is awkward and unclear. Choice C uses an improper prepositional phrasing (i.e. separate through). Choice D fails to use the proper phrase (it should be “separate from”) and also lacks parallelism. E. uses an improper prepositional phrasing with “separate among.” The original sentence is the most correct form available.

5. Students planning on becoming doctors should understand that by the time they have completed medical school, which takes many years and requires unwavering dedication, many of their other friends will finish school and start families.

A. many of their other friends will finish school and start families.
B. many of their other friends finished school and started families.
C. many of their other friends will have finished school and started families.
D. many of their other friends has finished school and started families.
E. many of their other friends were finished with school and started families.

The correct answer is C. This choice correctly uses the future perfect tense (i.e. will have) to express the idea that by the time one event has occurred, hypothetically another event will have taken place. The original sentence, choice A, incorrectly uses the simple future tense. Choice B incorrectly uses the past tense; the action has not yet
SECTION 6: WRITING

been completed because it is a hypothetical situation. Choice D uses the present perfect tense and is also incorrectly singular (i.e. has) when it should be plural (i.e. have). Choice E incorrectly uses the past tense (i.e. were).

6. Aware of next week’s deadline for her students’ college applications, generic letters of recommendation are all that the teacher can write.

A. generic letters of recommendation are all that the teacher can write.
B. generic letters of recommendation were all that the teacher could write
C. a generic letter of recommendation was all that the teacher could write.
D. the teacher can only write generic letters of recommendation.
E. the teacher only wrote generic letters of recommendation.

The correct answer is D. The original sentence is incorrect because of a modifier error. It does not pair the introduction clause with the independent clause that follows. The first clause (“Aware of next week’s deadline...”) introduces awareness which must “belong” to someone. Logically, generic letters do not possess this “awareness.” By placing “generic letter” after the sentences dependent introduction clause, the writer creates confusion and an improper sentence with such faulty logic. An animate object, such as a person, must follow the introduction clause in this sentence. The teacher must be aware. So choices A, B and C are evidently incorrect. Since the deadline is next week as indicated

by the permanent part of this sentence, one cannot use the past tense (i.e. wrote) to indicate the action performed by the teacher. The teacher must either perform the action in the present tense or in the future tense in order to match “next week’s deadline.” Thus, E can be eliminated and one is left with choice D which correctly pairs the subject with the dependent clause and is in the correct verb tense.

7. Norah told her mother that the whole box of cookies were eaten by the guest’s little boy when the guest was touring the house.

A. whole box of cookies were eaten by the guest’s little boy
B. whole box of cookies will have been eaten by the guest’s little boy
C. guests’ little boy ate the whole box of cookies.
D. whole box of cookies was eaten by the guests’ little boy.
E. whole box of cookies was eaten by the guest’s little boy.

The correct answer is choice E. The underlined part of the sentence is incorrect because of the use of the plural verb “were” in referring to the “box of cookies.” Although “of cookies” modifies the noun “box,” one must use a singular verb such as “was” because the verb refers to the singular noun “box.” This rule allows one to eliminate choice A. Since the end of the sentence defines the action as having occurred in the past (“when the guest was touring...”), one cannot use the future perfect tense (i.e. will have) as was used in choice B.
Choices C and D are incorrect primarily because they define the boy as belonging to a plural noun (i.e. “guests”). The end of the sentence clearly states that only one guest was present. By such process of elimination, the best answer is choice E.

8. Since they served large parties at the restaurant, the waiters could not possibly try to have worked faster without sacrificing the quality of customers’ dining experiences.

A. have worked faster without sacrificing the quality of customers’ dining experiences.
B. work faster without sacrificing their quality.
C. work faster without sacrificing the quality of customers’ dining experiences.
D. be working faster without sacrificing their quality.
E. work faster without lessening the quality of customers’ dining experiences.

The correct choice is C. The original sentence is incorrect because the form of the verb (i.e. have worked) is improper. The infinitive is necessary after a phrase such as “try to.” For example, “try to find,” “want to sleep,” “need to study.” After a helping verb and “to” one should generally use the infinitive form of a verb on the SAT. So choice A is clearly incorrect according to this rule. In choices B and D, the writer refers to “their quality” which is an ambiguous phrase. Are they referring to the waiters’ quality of service, the quality of the customers’ experience or the quality of the food? This must be clarified. So one may eliminate choices B and D. Choice E uses the correct form of the verb but it is awkward (“lessening the quality) and changes the meaning of the original sentence.

9. Now called demand money, the paper currency notes that circulated during the American Civil War were not only called treasury notes but referred to as greenbacks.

A. referred to as greenbacks.
B. it was called greenbacks, too.
C. also referred by greenbacks.
D. also called greenbacks.
E. also greenbacks.

The correct choice is D. The part of the sentence in question follows the “not only…but also…” structure which demands a form of parallelism. In the original sentence and in choice A, the writer has left out the “also” that is necessary when using “not only.” Additionally, parallel structure is missing when the writer switches from “called treasury notes” to “referred to as greenbacks.” Choice A is thoroughly flawed. Choice B also does not follow the “not only…but also…” structure and makes another mistake by using the pronoun “it.” Earlier in the sentence the author refers to “paper currency notes” which can be replaced by “they” but not “it.” Choice C violates the rules of parallelism and also uses an improper phrase with “referred by” in this context. Choice E violates the parallelism that is indicated by “not only called…” A phrase such as
“but also called…” must follow in this sentence and only choice D provides this in a proper fashion.

10. A natural reservoir located behind Parker Dam, on the border between Colorado and Arizona rests Lake Havasu.

A. on the border between Colorado and Arizona rests Lake Havasu.
B. Lake Havasu rests on the border between Colorado and Arizona.
C. Colorado and Arizona lie on the border of Lake Havasu.
D. on the border between Colorado and Arizona Lake Havasu rests.
E. Lake Havasu’s border lies on Colorado and Arizona.

The correct choice is B. The original sentence is wrong because of a misplaced, or dangling, modifier. This is the same reason choice D is incorrect. Choice C changes the meaning of the sentence and is illogical. Choice E correctly places “Lake Havasu” after the clause but it is awkward. Choice B corrects the modifier error of the original sentence and is the most logical selection.

11. In biology, scientists have proven that large skeletal muscle fibers compose countless myocytes, which are microscopic muscle cells.

A. compose countless myocytes, which are muscle cells.
B. are comprised of myocytes, which are microscopic muscle cells.
C. have comprising countless myocytes, which are microscopic muscle cells.
D. will have comprised countless myocytes.
E. compose countless myocytes, that are microscopic muscle cells.

The correct answer is choice B. The proper essential idiom that this question tests is “-to be- comprised of.” This essential idiom differs from “to compose.” Large items comprise, or are comprised of, smaller items. Smaller items compose larger items. So choices A and E can be eliminated since muscle fibers are larger than muscle cells and must therefore be comprised of cells and not compose cells. Also, choice E misuses “that” since the clause should remain “which are microscopic muscle cells.” Choices C and D fail to use the present tense, and so they are incorrect because of their improper tenses. Only choice B corrects the misuse of “compose” and is the proper tense.
SECTION 6: WRITING

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

12. After spending eight weeks of **summer** playing and relaxing, the children
   A knew that the beginning of the school year was eminent. **No error.**
   B C D E

The error is choice D. This question tests word usage. Questions that test this often use homonyms and casual language to trick test takers. Eminent means “well-known, reputable” while imminent mean “approaching, soon to happen.” The error is evident when one knows the definitions of these words and the difference between the two. The word “summer” should not be capitalized (as with all seasons) and school year is acceptable as two separate words.

13. Some historians believe that the oppressive forces used during the peak of **imperialism** revived **gorilla** warfare, a form of combat which involves small groups of fighters that strike the enemy **through** surprise attacks. **No error.**
   A B C D E

The error is choice B. This question tests word usage. “Gorilla” refers to the animal, while “guerrilla” is exclusively used to refer to a type of warfare. The error is evident when one knows the definitions of these words and the difference between the two.
14. Since the warriors had brutally abused and murdered their ancestors years ago, the habitants of the island felt compelled to carry out hostile acts against the warriors when they returned to the island. No error.

The error is choice C. This question tests word usage. Hostel means “an inexpensive lodging” while hostile mean “malicious, harsh, violent.” The error is evident when one knows the definitions of these words and the difference between the two.

15. The idol construction workers were sitting around tossing pebbles, whistling and wasting their time. No error.

The error is choice A. This question tests word usage. Idol means “an object of worship” while idle means “not in use; avoiding work” The error is evident when one knows the definitions of these words and the difference between the two.
SECTION 6: WRITING

16. If Jane had collected more money then she would of been able to buy enough tickets for the entire group. No error.

The error is choice B. Use of the phrase “would of” is a common error of conversational language. The correct phrase is “would have” since “would have is neither logical nor truly existent in formal language.

17. Last week the Drug Enforcement Agency seized a large shipment of illicit drugs and is now working to track down other criminals involved with drug trafficking. No error.

The error is choice C. This question tests word usage. Elicit means “to draw out, to evoke” while illicit mean “illegal.” The error is evident when one knows the definitions of these words and the difference between the two.
SECTION 6: WRITING

18. **Knowing that** the deadline for her **student’s application** was approaching, the teacher said that she would **try and** finish the letter of recommendation as soon as possible. **No error.**

The error is choice D. The proper essential idiom is “try to” while “try and” is just an improper conversational phrase. When there are two verbs (to try, to finish), generally only one will be conjugated and that’s why this should read “try to finish,” which leaves the second verb in its infinitive form.

19. When Louis **arrogantly declared** that he would easily become a wealthy entrepreneur before he **graduated from** college, his teacher told him that he needed to gain some **insight** into the world of business and understand its many challenges. **No error.**

The error is choice C. This question tests word usage. Incite means “to spark, to rouse” while insight means “perspective, an informed viewpoint” The error is evident when one knows the definitions of these words and the difference between the two.
SECTION 6: WRITING

20. It is unlikely that the **automobile dealership** will **wave** your **service charge**
    A       B       C
even if you tell them that you **have bought** cars from them before. **No error.**
    D       E

The error is choice B. This question tests word usage. Wave means “to greet; a
swell” while waive means “to give up a claim voluntarily.” The error is evident when
one knows the definitions of these words and the difference between the two.

21. The **doctor** rose to an **imminent** position as chief surgeon at the hospital after
    A       B       C
years of hard work and **dedication to** his patients. **No error.**
    D       E

The error is choice C. This question tests word usage. Eminent means “well-
known, reputable” while imminent mean “approaching, soon to happen.” The error
is evident when one knows the definitions of these words and the difference
between the two.
SECTION 6: WRITING

22. Although she is now an **eminent** lawmaker on **Capitol Hill**, the senator had to study legislative **precedents** and learn from politicians of the past to earn the **position** she holds today. **No error.**

The correct choice is E. The sentence is correct as written.

23. John Rockefeller, who was very **conscious of** efficiency, made sure **resources never sat idle** and productivity was always **maximized.** **No error.**

The correct choice is E. The sentence is correct as written. “Conscious of” is the proper phrase and “idle” does not need to be in the form of an adverb, even though it is describing the verb “to sit.” This is simply an exception to the rules of adverbs.
SECTION 6: WRITING

24. Nicole's cheerful spirit and humorous anecdotes never fail to illicit feelings of joy and amusement. No error.

The error is choice C. This question tests word usage. Elicit means “to draw out, to evoke” while illicit mean “illegal.” The error is evident when one knows the definitions of these words and the difference between the two.

25. I know that I would of been hired for the position if I had dressed more professionally and arrived on time. No error.

The error is choice B. Use of the phrase “would of” is a common error of conversational language. The correct phrase is “would have” since “would have” is neither logical nor truly existent in formal language.
SECTION 6: WRITING

26. When I looked for Jessica at the party, I noticed that she was already standing between several of her friends from the basketball team. No error.

The error is choice D. When referring to two specific limits or objects, “between should be used.” However, when referring to a group of people or an undefined number, “among” is generally the correct preposition to use. The sentence refers to “several of [Jessica’s] friends” and so “among” is more appropriate.

27. Due to his extensive list of accomplishments, Samir is between the most qualified applicants for the research grant. No error.

The error is choice B. When referring to two specific limits or objects, “between should be used.” However, when referring to a group of people or an undefined number, “among” is generally the correct preposition to use. The sentence refers to “the most qualified applicants” (an undefined number) and so “among” is more appropriate.
28. In the line for school lunch, Linda was standing among her two best friends, Sarah and Alyssa. No error.

The error is choice C. When referring to two specific limits or objects, “between should be used.” However, when referring to a group of people or an undefined number, “among” is generally the correct preposition to use. The sentence refers to “[Linda’s] two best friends” and so “between” is more appropriate.

29. Jennifer claimed that she placed her test paper among the other answer sheets that were already piled on the desk. No error.

The sentence is correct as written.
(1) They say that college will be the four best years of your life. (2) When I heard this, I truly wanted to embrace the process of making the smartest decision about which college to attend. (3) With parents who wanted me to stay nearby and having only a home garden with as many money trees as magical beanstalks, I realized that location and expenses were two major factors in my decision. (4) I also was very interested in the academic rigor of my prospective schools and the post-graduation job opportunities. (5) As an aspiring female entrepreneur, I wanted to attend a number of universities along the east coast that offered strong undergraduate business programs. (6) However, this was a far cry from my cozy home in Daytona Beach, Florida and would mean a difficult adjustment to a frigid climate and a faster pace of life. (7) Furthermore, the costs of these schools were through the roof, so I needed plenty of scholarships. (8) If I stayed in-state for school, I would qualify for financial aid that would subsidize the cost of my tuition, and I would be able to enjoy the sunny weather for another four years. (9) Everyone knows that the best social lives follow the palm trees. (10) I would be able to party and still get a diploma from a decent college! (11) Florida colleges also have a large number of international students. (12) Yet as the May 1<sup>st</sup> college decision deadline approached rapidly, I realized that it’s wrong to just focus on the easy way out and stay in one place. (13) I had worked hard for four years of high school, so now was not the time to settle. (14) When the deadline arrived in May, I had decided to pursue my dreams of starting my own business by studying entrepreneurship at an elite university in the northeast that would meet my needs. (15) I decided to take out loans to cover the cost of my education because college is a priceless experience.
30. Which of the following changes is the best way to replace the underlined portion of sentence 3 (reproduced below)?

*With parents who wanted me to stay nearby and having only a home garden with as many money trees as magical beanstalks, location and expenses were two major factors in my decision.*

A. have to stay nearby and having only
B. being staying nearby and having only
C. being staying nearby and had only
D. stay nearby and had only
E. stay nearby and having only

This sentence is incorrect for its misuse of “having,” which creates an awkward flow. The SAT often tests your knowledge of how to use “being” and “having.” When you see either of these words, a red flag should go off and you must proceed with caution. Sentences that contain these words are usually incorrect. Choice A changes the meaning of the sentence from a situation in which the parents want their child nearby to a situation in which the child must stay nearby. The change would make the parents appear commanding rather than concerned and caring. On second thought, the parents always seem commanding anyway, right?! Choice B and choice C both continue the misuse of “being,” although choice C does in fact correct the error with the infinitive “to have,” going from “having only” to the correct “had only.” Choice E is free of the “being” error but falls victim to misusing “to have.” Only choice D is truly free of awkward grammar errors, thus making it the best choice.

31. Which of these words would be most logical to insert at the beginning of Sentence 9?

A. Besides,
B. However,
C. Of course,
D. Glaringly,
E. Dubiously,

Sentence 9 is continuing the argument in favor of attending in-state college. The writer is trying to convey the added benefit of adding in-state college beyond, or *besides*, the tuition and climate advantages. Choice B “However” is incorrect because the thought in Sentence 9 does not contrast the ideas presented before it in Sentence 7 and Sentence 8. Both choice C and choice D indicate an obvious nature of this information, but this fact is not as well known as most common knowledge like who is at the top of the Billboard Charts now or who won the Super Bowl last year. Okay, maybe that’s not the most common of “common knowledge” but Sentence 9 does not present an obvious idea, so choice C and D are not appropriate. For choice E, you must know that dubious means questionable or uncertain. Now, the writer’s claim about social lives and palm trees is in fact questionable; it would be disputed by many people who live in places without palm
trees. Yet, would it support the writer's argument to say that his own claim is dubious? No! Only choice A, "Besides" offers further support for this argument in favor of in-state college that the writer presents.

32. What is the best way to combine the underlined portion of sentence 9 and sentence 10?

Everyone knows that the best social lives follow the palm trees. I would be able to party and still get a diploma from a decent college!

A. palm trees—I would be
B. palm trees, so I would be
C. palm trees, however, I would be
D. palm trees; nevertheless, I would be
E. palm trees, consequently, I would be

Sentence 10 builds on the claim made in sentence 9 about the value of the social life at the in-state college. Choice A is an inappropriate way to combine sentence 9 and sentence 10 with an informal hyphen that provides no additional information in the way that a transitional word does. Choice C demands a semi-colon in front of “however” in order for it to be grammatically correct. Moreover, “however” is the wrong transition here because the writer is not presenting a conflicting idea. Choice D is inadequate because once again, a conflicting thought is not being presented in the second main idea. Choice E is flawed because it lacks the necessary semi-colon in the compound sentence and consequently is a poor word choice for when you are discussing the added benefits of going to a certain college. If you wanted to say “Jimmy got caught for letting four pigs loose in the lunchroom; consequently, he had to serve a three-suspension and a severe scolding from his parents.” then that would be an appropriate use of the “consequently” transition. By process of elimination and because it is grammatically ideal, choice B is the best answer for this question.

33. In context, which of the choices below would be the best addition to follow “…international students.” in sentence 10?

A. (As it is now)
B. ;this would provide a critical network of diverse individuals if I pursued global entrepreneurship.
C. –international students will be detrimental to my college experience.
D. , which makes Florida a better social location.
E. , but this number is expected to decrease in future years with the United States government creating more rigorous immigration and student visa regulations.

Sentence 10 needs an addition. Without more clarification, this sentence is out of place and an inadequate line to end the second paragraph. Choice A is incorrect because the sentence cannot be left as it is now. The writer needs to make an argument that continues to support staying in Florida for college
34. Which of the following sentences is the most out of place?
A. Sentence 3
B. Sentence 5
C. Sentence 13
D. Sentence 14
E. Sentence 15

When you got through with reading this passage, you probably scratched your head and wondered if that was the end. The passage does not end smoothly. It was almost as if an airplane was landing and just as it was about to touch down on the runway, the plane took off again. Why? Sentence 15 introduces a new series of explanations by mentioning finances that is not completed in the conclusion paragraph. Sentence 14 provided the closure that was necessary and should not have been added to unless a complete explanation of the results from this decision was provided. Choice E is correct.

35. In order to provide full closure on the writer’s choice for college, a paragraph should have been included on which of the following topics?
A. How the writer reconciled the problems of not going to an in-state college
B. How the writer paid for her college expenses
C. How the writer’s parents felt about her college decision
D. How the writer felt after graduating from her selected college
E. How the writer was received when first arriving at college

This entire passage primarily is a compare and contrast between an in-state college and out-of-state college choices for a young aspiring female entrepreneur. College expenses were just a part of the writer’s ambivalence, or mixed feelings, about going out-of-state. She was also concerned about a social life, academic rigor and job opportunities. As the conclusion paragraph demonstrates, the writer began a thought that would show how she dealt with the hurdles that faced her in attending an out-of-state college. Choice B is too narrow, while choice C is not very relevant to this specific writer’s message. Don’t we all wish that our parents choices for OUR college experience was at least less significant in comparison to our own choices? But then again, they have the best intentions at heart…Did you catch that? This explanation just went off on a tangent! Choice D and E would do the same if the writer began to
ramble about her feelings after graduation or how her initial reception at college was. Sure, it would be nice to read about and understand. Nevertheless, this passage is analyzing in-state and out-of-state colleges; the writer would need a book, or perhaps an entire library, to cover the rest of the issues raised here. Choice A covers the scope of what an additional paragraph would discuss and is the remaining choice after a logical process of elimination.
1. If \( f(x) = \frac{x}{3} + 3 \), \( g(x) = |x^2 - 4| \) and \( f(g(d)) = 3 \), which of the following is a possible value for \( d \)?

A. \(-2\)  
B. \(3\)  
C. \(0\)  
D. \(4\)  
E. \(-6\)

**Answer Explanations:**

Here we have a composition of functions! One way is to place the \( g(x) \) function, which is \( x^2 - 4 \), into the \( f(x) \) function and then set that amount equal to 3. That takes too much time! If you really want to save time, find out which value of \( x \) will make \( f(x) = 3 \), and then set the \( g(x) \) function equal to that \( f(x) \) value. Let's illustrate: 3 = \( f(x) = \frac{x}{3} + 3 \). When we simplify, this means that \( f(x) = 0 \) when \( x = 0 \). Therefore \( f(g(d)) = 3 \) when \( x = 0 \), so when we place \( g(x) \) into \( f(x) \) to get 3, the \( g(x) \) value must equal 0. So, we can solve \( g(x) = x^2 - 4 = 0 \). There are two solutions (\( x = -2 \) and \( x = 2 \)), so we must see which one is among our choices. Choice A has \(-2\), so that is the right answer.

A. Correct  
B. This response would not produce an \( f \) value = 3.  
C. This would make the \( f \) function zero, but we need to place \( g(x) \) into \( f(x) \).  
D. This response would not produce an \( f \) value = 3.  
E. This would produce an \( f \) value of 1.

2. If \( \frac{10}{x} = -20 \), what is the value of \(-4x + 3\)?

A. \(-5\)  
B. \(11\)  
C. \(5\)  
D. \(1\)  
E. \(2\)
We must find out what \( x \) is before we get \(-4x + 3\). Cross-multiplying the first equation gives us: \(-20x = 10\). So, \( x = -\frac{1}{2} \). Placing that value into the second expression, we get: \(-4(-\frac{1}{2}) + 3 = 2 + 3 = 5\) (choice C).

A. This is the result if \( x \) was incorrectly calculated as 2.
B. This is the answer if \( x \) was incorrectly calculated as \(-2\).
C. Correct
D. This is the result if \( x \) was incorrectly calculated as \(\frac{1}{2}\).
E. This is the answer if \( x \) was correctly calculated, but you forgot to add 3.

The respective solutions to the inequalities are \( x > -3 \) and \( x < 3 \). So, we are looking for any value that is not in either of these intervals. The only one is 3, which is choice A.

A. Correct
B. This value is in the solution set.
C. Same as B.
D. Same as B.
E. Same as B.

The first number that comes to mind that is a base raised to the fourth power is \(2^4 = 16\), which is \(1.6 \times 10^1\). However, the exponents in the answers are large! This means that we have to see the sequence of exponents when we start adding zeroes to our original base of 2 and then raise it to the 4th power. Let’s try \(2^0\). That is 160,000, which can be shown in scientific notation as \(1.6 \times 10^5\). Notice that the exponents went up by 4 by adding a zero to the base, so the sequence of exponents is therefore 1, 5, 9, 13, … The only choice that has one of these exponents is C.

A. This is not possible using an integer starting with 2.
B. Same as A.
C. Correct
D. See A.
E. See A.

5. If \( b = 24^\frac{4}{3} \), what is the value of \( x \)?

A. 36
B. 4/81
C. 81
D. 4/3
E. 108/3
SECTION 7: MATH

Answer Explanations:
The root 4/3 means that we take the cube root of base of 27 and then raise that result to the 4th power. Doing this, the cube root of 27 (which is 3) raised to the 4th power = 81, which is answer C.

A. This is 27 times 4/3.
B. This is 4 divided by the product of 27 and 3.
C. Correct
D. This is 4 divided by the cube root of 27.
E. This is 27 times 4 divided by 3

6. If \(2\sqrt{x} = y^2\) and \(y = 4\) what is the value of \(x\) ?

A. 8
B. –8
C. 64
D. 16
E. 4

Answer Explanations:
We can substitute \(y = 4\) into the first equation to get \(2\sqrt{x} = 4^2 = 16\). We can divide both sides by 2 and then square both sides to get \(x = 64\). This is choice C.

A. This is what the square root of \(x\) equals.
B. We cannot have negative square roots.
C. Correct
D. This is the right side of the square root equation.
E. This value does not satisfy the equation.

7. If \(x^{2x-4} = 8^4\), what is the value of \(4x - 2\)?

A. 8
B. 16
C. 32
D. 30
E. 2

Answer Explanations:
We can rewrite this equation just using base 2 as follows: \(2^{2x-4} = (2^3)^4\). This becomes \(2^{2x-4} = 2^{12}\). The bases are equal, so the exponents are equal. Therefore, \(2x - 4 = 12\), and \(2x = 16\). We can get \(x = 8\), but we need \(4x - 2 = 4(8) - 2 = 32 - 2 = 30\).

A. This is the value of \(x\).
B. This response has an incorrect calculation of \(x = 4\) if the bases are ignored.
C. This is 4x, but not 4x – 2.
D. Correct
E. This is arrived at by incorrectly raising \(2^3\) to the 4th power, getting \(2^7\) and then setting \(2x - 4 = 7\).

8. A study regarding students’ favorite ice cream flavors is conducted at a particular middle school. Of 320 students interviewed, the following data was collected:

<table>
<thead>
<tr>
<th></th>
<th>Vanilla</th>
<th>Chocolate</th>
<th>Strawberry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>40</td>
<td>75</td>
<td>35</td>
<td>150</td>
</tr>
<tr>
<td>Girls</td>
<td>80</td>
<td>60</td>
<td>30</td>
<td>170</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>135</td>
<td>65</td>
<td>320</td>
</tr>
</tbody>
</table>
If you selected a random student who participated in the survey, what is the probability that you select someone who did not choose Chocolate as his or her favorite?

A. 42%
B. 14%
C. 54%
D. 58%
E. 60%

**Answer Explanations:**
Correct answer: D

Choosing someone who did NOT choose Chocolate means finding out how many people chose Vanilla or Strawberry. 120 people chose Vanilla and 65 chose Strawberry. This makes 185 in all.

185 divided by 320 gives 0.58 (after rounding) which is the same as 58%.
SECTION 7: MATH

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

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

Answer: \( \frac{7}{12} \)

Write answer in boxes.

\[
\begin{array}{c}
\text{Fraction line} \\
\text{Grid in result.}
\end{array}
\]

Answer: 2.5

\[
\begin{array}{c}
\text{Decimal point}
\end{array}
\]

Answer: 201

Either position is correct.

\[
\begin{array}{c}
\text{Note:} \text{ You may start your answers in any column, space permitting. Columns not needed should be left blank.}
\end{array}
\]

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

Answer: \( \frac{1}{2} \)

\[
\begin{array}{c}
\text{Acceptable ways to grid } \frac{2}{3} \text{ are:}
\end{array}
\]

Answer: \( .66 \)

\[
\begin{array}{c}
\text{Answer: } .6617
\end{array}
\]
9. Music is created when tones (known as notes) are produced separately or together. The frequency of these tones is measured in cycles per second. Musical instruments are normally tuned with equal temperament, with the note “A” above middle “C” on a piano having a frequency of 440 cycles per second. To create a major or a minor chord, three notes need to be played at the same time. The ratio of note frequencies for a major chord is 4:5:6, while the ratio for a minor chord is 10:12:15. What is the frequency ratio (in cycles per second) of the middle note of a major chord to the middle note of a minor chord?

**Answer Explanations:**
The correct answer is 25/24. We have two sets of ratios, but they are both in different scales. The easiest way to deal with this situation is to change the 4:5:6 proportion so that it starts with 10, like the other proportion. Since 10 is 10/4 or 2.5 times 4, we multiply each part of the 4:5:6 proportion by 2.5 to get 10:12.5:15. The middle tone of this proportion is now 12.5, so we divide 12.5 by the middle tone of the second proportion (12): 12.5/12. To eliminate the decimal in the numerator, we can multiply the numerator and denominator of the fraction by 2 to get 25/24.

10. Using the chart above, if \( f(x) = \frac{3}{4}x - 2 \), what is \( b \)?

**Answer Explanations:**
If \( f(x) = 10 \), then \( 10 = \frac{3}{4}a - 2 \). Simplifying this equation \( a = 16 \).

\[
f(x) = 16 = \frac{3}{4}b - 2
\]

The function \( 18 = \frac{3}{4}b \)

\[
18 \left( \frac{4}{3} \right) = \frac{3}{4}b \left( \frac{4}{3} \right)
\]

\[
24 = b
\]
11. If X is the set of integers between –20 and 20, and a number is in set Y if it is the square of a number in X, how many elements of set Y are in set X?

**Answer Explanations:**
We are dealing with squares, and we notice that the negative and the positive of a number produce the same result. For example, \((-1)^2 = 1^2\).
So, we have 20 numbers that are in both sets. But, wait a minute – we cannot forgot about 0! The number zero is definitely in set X and its square is also zero. Therefore, we add that number to the number of elements in both sets to get 21.
12. If \( x^y = 9 \), and \( 3y = 2 \), what is the value of \( x \) ?

**Answer Explanations:**
y = \( \frac{2}{3} \), so we get \( x^{\frac{2}{3}} = 9 \). Raising both sides to the \( \frac{3}{2} \) power, we get

\[
\left( x^{\frac{2}{3}} \right)^{\frac{3}{2}} = 9^{\frac{3}{2}}
\]

\[
x = (\sqrt[3]{9})^3 = 3^3 = 27
\]

13. If \( y \) is a prime number such that \( 4y > 13 > \frac{7}{8}y \), what is one possible value of \( y \)?

**Answer Explanations:**

For the first inequality, \( y > \frac{13}{4} \), which is \( y > 3\frac{1}{4} \). The second equality \( 13 > \frac{7}{8}y \) can be solved by multiplying both sides by \( \frac{8}{7} \) to get \( 114/7 > y \). This is \( 16 \frac{2}{7} > y \), so this means that \( y \) is less than \( 16 \frac{2}{7} \). Putting all this together, \( y \) must be a prime number greater than \( 3\frac{1}{4} \) that is less than \( 16 \frac{2}{7} \). The possible values of \( y \) that satisfy both inequalities are 5, 7, 11 and 13.

14. What is the slope of a line perpendicular to the line through the points \( (2, 6) \) and \( (-1, 4) \)?

**Answer Explanations:**

Correct answer: \( -\frac{3}{2} \)

To find slope, use the formula:

\[
slope = \frac{y_2-y_1}{x_2-x_1}
\]

For the points \( (2, 6) \) and \( (-1, 4) \),

\[
Slope = \frac{4-6}{-1-2} = \frac{-2}{-3} = \frac{2}{3}
\]

However, slope of perpendicular lines is both opposite (switch + and −) and reciprocal (flip the fraction)

So the answer becomes \( -\frac{3}{2} \).

15. What is the slope of a line parallel to the line \( 4x − 3y = 16 \)?

**Answer Explanations:**

Correct answer: \( \frac{4}{3} \)

To find the slope, simply solve the equation for \( y \).

Subtracting \( 4x \) from each side gives: \( -3y = -4x + 16 \)

Dividing by \(-3 \) gives:

\[
y = \frac{-4}{-3}x + \frac{16}{-3}
\]

Which then simplifies to:

\[
y = \frac{4}{3}x - \frac{16}{3}
\]

The slope is the number in front of the \( x \). So, slope = \( \frac{4}{3} \).
Parallel lines have the same slope, so the solution is \( \frac{4}{3} \).

16. Find the distance between the y-intercept of the line \( y = 2x + 3 \) and the x-intercept of the line \( 3x - 4y = 12 \).

**Answer Explanations:**

Correct answer: 5

The y-intercept of \( y = 2x + 3 \) is \((0, 3)\)

The x-intercept of \( 3x - 4y = 12 \) is found by letting \( y = 0 \) and solving for \( x \):

\[
3x - 4(0) = 12 \\
3x = 12 \\
x = 4
\]

So, the x-intercept is \((4, 0)\)

The distance formula is

\[
d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}
\]

When you plug in the x- and y-values, you get

\[
d = \sqrt{(0 - 4)^2 + (3 - 0)^2}
\]

That gives \( d = \sqrt{(-4)^2 + (3)^2} \)

This equals \( d = \sqrt{16 + 9} \)

Then you have \( d = \sqrt{25} \) which equals 5.

17. For the following test scores, let the mean = \( a_1 \), median = \( a_2 \), and mode = \( a_3 \).

<table>
<thead>
<tr>
<th>Score</th>
<th>80</th>
<th>95</th>
<th>90</th>
<th>70</th>
<th>78</th>
</tr>
</thead>
<tbody>
<tr>
<td>78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Find \( a_1 + a_2 + a_3 \).

**Answer Explanations:**

Correct answer: 240

To find the mean, simply add up all 8 values and divide by 8.

This gives

\[
\frac{80 + 85 + 90 + 70 + 78 + 78 + 95 + 78}{8} = \frac{664}{8} = 83.
\]

So \( a_1 = 83 \)

To find the median, put the numbers in order from smallest to largest.

\[
70 \quad 78 \quad 78 \quad 78 \quad 80 \quad 90 \quad 95 \quad 95
\]

The median is the number in the middle. Since 78 and 80 are both in the middle (this happens when we have an even number of data values), we find the mean of those.

The mean of 78 and 80 is found by adding them up and dividing by 2.

\[
\frac{78 + 80}{2} = \frac{158}{2} = 79.
\]

So \( a_2 = 79 \)

The mode is the number that appears the most. This number is 78.

So \( a_3 = 78 \)
The solution requires us to add up all three values we found. So, $83 + 79 + 78 = 240$

18. The average age of a 12-person club is 30. When one new member joins, the average age rises to 31. What is the age of the new member?

**Answer Explanations:**

Correct answer: 43

If the average age of 12 people is 30, then their ages should add up to $12 \times 30 = 360$.

If the average age of 13 people is 31, then their ages should add up to $13 \times 31 = 403$.

That means that the new member’s age has to raise the total from 360 to 403.

So, his age is $403 - 360 = 43$. 
SECTION 8: CRITICAL READING

Directions: Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

1. Although the government claims to be a united entity that works cohesively, it has become apparent that the divided government is --------- -- fails to implement interdepartmental collaboration.
   A. ineffective  
   B. discrete  
   C. connected  
   D. autonomous  
   E. strategic

Because the first clause needs to be contrasted (uses “Although…”), the blank must be an antonym of united. The independent clause (the second clause, begins “…it has…”) needs to refute what is said in the first clause, so the blank should be similar to “separate” to counter “united.” Choice B. discrete means “consisting of unconnected distinct parts,” (not discreet) so it is the appropriate choice here. Other choices may make sense, but they are not the best options in the context of this sentence.

2. Based on the United States’ federal budget, domestic security is an --------- --- priority because it accounts for such a significant percentage of federal spending.
   A. unequivocal  
   B. important  
   C. egregious  
   D. impermissible  
   E. insignificant

Clearly if you use the budget as an indicator of priorities, the fact that domestic security “accounts for such a significant percentage of federal spending” means it is a top priority. So which choice solidifies domestic security as a priority? “Equivocal” implies the existence of doubt, so “unequivocal” means that there is no doubt. Choice A is correct.

3. By cleverly balancing her varied commitments and always being on the ball, Amanda has proved that she is an --------- student who will excel at the university level.
   A. overcommitted  
   B. eager  
   C. academic  
   D. astute  
   E. ostensible

It appears like Amanda is very shrewd based on the description in the clause that begins “By cleverly balancing…” A synonym of “shrewd” is astute and “astute” people typically excel, so feel free to select choice D, the correct answer! You may know this word meaning by hearing it before, studying the dictionary or by eliminating the other answer choices that are significantly less appropriate to refer to these qualities in a student.
SECTION 8: CRITICAL READING

4. It was terrifying to watch the policeman recall the fatal car accident with the least bit of concern; at this point, I realized that the victims would find minimal or -- by turning to the authorities for help.

   A. casually…indifference
   B. traumatically…assistance
   C. anxiously…empathy
   D. blithely…recourse
   E. vividly…ease

You know that the first blank must mean that the policeman showed little interest because he had the “least bit of concern.” Only choice A and D indicate a lack of interest. However, in the second blank the writer is stating that victims would only find minimal consolation in the authorities. They would, however, find plenty of indifference (or, lack of concern), not minimal indifference. Choice D is correct because blithely implies that one is “carefree or not showing the due concern” and along with little sympathy, the authorities offered minimal recourse, or options for help.

D. curable…murdered
E. hypothetical…tested

Clearly the virus is contagious because it can spread (“would paralyze the entire Eastern bloc”). No other description of the virus is appropriate based on the context, and it is logical for the infected individuals to be isolated just as was the case with past illnesses such as SARS. Choice A is correct.

6. When the princess arrived in New York City, her entourage members were disappointed to observe her comments about litter, noting how the city streets were, rather than the city’s cultural value and inherent vibrancy.

   A. well-paved…valuing
   B. ignorant…belittling
   C. animated…demeaning
   D. squalid…appreciating
   E. wasteful…ignoring

Litter would not provoke someone to discuss the streets’ pavement. Streets cannot be ignorant or wasteful, and calling the streets “animated” would be a compliment when the princess is actually expressing a negative view, hence her entourage’s disappointment in her lack of cultural appreciation. Choice D. squalid means “dirty, wretched” so that is the best choice. Further, the people around the princess would be disappointed in the fact that she is not appreciating the true urban beauty.

A. contagious…isolated
B. dangerous…sequestered
C. harmless…placed
Below are two passages about human biology and evolution. The first is an excerpt from a publication on the concept of “inherited traits” by Jean-Baptiste Lamarck and the second is an excerpt from Charles Darwin’s On the Origin of Man.

Passage 1

“An observation which has for a long time struck me is that, having remarked that the habitual use and exercise of an organ proportionally develops its size and functions, as the lack of employment weakens in the same proportion its power, and even more or less completely atrophies it, I am apprised that of all the organs of man’s body which is the most strongly submitted to this influence, that is to say, in which the effects of exercise and of habitual use are the most considerable, is it not the organ of thought—in a word, is it not the brain of man?

“Compare the extraordinary difference existing in the degree of intelligence of a man who rarely exercises his powers of thought, who has always been accustomed to see but a small number of things, only those related to his ordinary wants and to his limited desires; who at no time thinks about these same objects, because he is obliged to occupy himself incessantly with providing for these same wants; finally, who has few ideas, because his attention, continually fixed on the same things, makes him notice nothing, that he makes no comparisons, that he is in the very heart of nature without knowing it, that he looks upon it almost in the same way as do the beasts, and that all that surrounds him is nothing to him: compare, I say, the intelligence of this individual with that of the man who, prepared at the outset by education, has contracted the useful practice of exercising the organ of his thought in devoting himself to the study of the principal branches of knowledge; who observes and compares everything he sees and which affects him; who forgets himself in examining everything he can see, who insensibly accustoms himself to judge of everything for himself, instead of giving a blind assent to the authority of others; finally, who, stimulated by reverses and especially by injustice, quietly rises by reflection to the causes which have produced all that we observe both in nature and in human society; then you will appreciate how enormous is the difference between the intelligence of the two men in question.
Passage 2
We shall best understand the probable course of natural selection by taking the case of a country undergoing some physical change, for instance, of climate. The proportional numbers of its inhabitants would almost immediately undergo a change, and some species might become extinct. We may conclude, from what we have seen of the intimate and complex manner in which the inhabitants of each country are bound together, that any change in the numerical proportions of some of the inhabitants, independently of the change of climate itself, would most seriously affect many of the others. If the country were open on its borders, new forms would certainly immigrate, and this also would seriously disturb the relations of some of the former inhabitants. Let it be remembered how powerful the influence of a single introduced tree or mammal has been shown to be. But in the case of an island, or of a country partly surrounded by barriers, into which new and better adapted forms could not freely enter, we should then have places in the economy of nature which would assuredly be better filled up, if some of the original inhabitants were in some manner modified; for, had the area been open to immigration, these same places would have been seized on by intruders. In such case, every slight modification, which in the course of ages chanced to arise, and which in any way favored the individuals of any of the species, by better adapting them to their altered conditions, would tend to be preserved; and natural selection would thus have free scope for the work of improvement. We have reason to believe that a change in the conditions of life, by specially acting on the reproductive system, causes or increases variability; and in the foregoing case the conditions of life are supposed to have undergone a change, and this would manifestly be favorable to natural selection, by giving a better chance of profitable variations occurring; and unless profitable variations do occur, natural selection can do nothing. Not that, as I believe, any extreme amount of variability is necessary; as man can certainly produce great results by adding up in any given direction mere individual differences, so could Nature, but far more easily, from having incomparably longer time at her disposal. Nor do I believe that any great physical change, as of climate, or any unusual degree of isolation to check immigration, is actually necessary to produce new and unoccupied places for natural selection to fill up by modifying and improving some of the varying inhabitants.
7. The author of Passage 1 would most likely agree that the process that is exercised most extensively is

A. rigorous weightlifting
B. altered-pitch hearing
C. close-proximity seeing
D. spatial planning
E. deep breathing

In the first paragraph of Passage 1, the author suggests that the organ that is used most extensively is the brain. With this in mind, you must consider which activity will require the most brainpower. Weightlifting primarily requires external physical strength, while deep breathing requires lung strength internally (eliminate A and E). Hearing involves primarily involves your ears while seeing involves the eyes (eliminate B and C). Although each of these activities requires a fair amount of mental power, no choice requires as much of the brain as choice D does, which is spatial planning. In your head you would have to plan out how to furnish your entire house to be an expert in spatial planning, and visualizing concepts without models requires a significant amount of brainpower. Choice D is best.

8. According to Passage 1, intelligence is determined by education such as through books, intellectual discussions and thorough research. The only form of education in these answer choices is choice B. debate, which implies intellectual concepts and delivery.

9. In the sentence beginning “An observation which has for a long time…and even more or less completely atrophies it …” in Passage 1 the term “atrophies” most nearly means

A. earns
B. deteriorates
C. significantly gains
D. changes
E. ameliorates

In this context, the author is discussing how if one does not use certain organs, those organs will eventually weaken or waste away. Thus, which word means “waste away”? Certainly choice A and choice C don’t fit, and neither does choice D because “changes” is too vague. “Deteriorate” means “to diminish in quality”…or “waste away”! Ameliorate is more or less the opposite, meaning “to improve.” Therefore, choice B is correct. Use logic and vocab skills!
SECTION 8: CRITICAL READING

10. Which of the following terms most closely resembles a part of people’s lives that the author most disagrees with following?
   A. focusing in without regard to surroundings
   B. challenging superiors
   C. standard routine
   D. studying the branches of knowledge
   E. education

   The author clearly encourages the less intelligent individual to go to school, stay focused on studies and pursue the real truth….not just the accepted truth. Therefore it is okay to be engrossed in work, challenge authority, get an education and study various subjects. But it is wrong to blindly follow routine, as the author suggests is characteristic of the less intelligent individual. Pick C.

11. Based on the provided text, the author of Passage 1 would believe that the LEAST intelligent individual is
   A. the student who remains engrossed in his dissection despite calls for dinner from his mother
   B. the sophisticated young man who respectfully agreed not to publish a controversial paper exposing safety concerns in his school
   C. the young woman who breaks her routine to attempt a new path in life
   D. the grandmother, who in an attempt to avoid dementia, keeps her mind active by knitting and playing cards
   E. the scientist who meticulously compares all the data before him prior to drawing a conclusion

   The author of Passage 1 stresses that it is critical to analyze provided information and authority. It is not intelligent to be an animal who follows routine and takes order. Therefore, despite the young man being sophisticated and respectful, it is not intelligent to be submissive, especially when it is not in the best interest of the community (i.e. safety problems). Therefore, it is intelligent to be passionate, daring, active and careful which means that the author would approve of the intelligence of individuals in choice A, C, D and E. Choice B is correct.

12. In the context of a comparison with respect to a country, Passage 2 analyzes
   A. the results of reproduction measures versus those of climate change
   B. the effects of an external stimulus and an internal stimulus
   C. how natural selection has affected inherited traits
   D. economic and social conditions that affect the core citizenry
   E. trees and mammals in any given region

   A. the results of reproduction measures versus those of climate change

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   C. how natural selection has affected inherited traits
   D. economic and social conditions that affect the core citizenry
   E. trees and mammals in any given region
When providing a comparison using the country example, the author compares the impact of an external factor (i.e. climate change) to the impact of an internal factor (i.e. population control). “Reproduction” does not directly match with the concept of “a country” and “inherited traits” relates back to Passage 1 (eliminate choice A and choice C). Choice D is irrelevant and choice E relates to a specific example within the author’s explanation of border changes and an influx of organisms. Choice B is best.
13. The passages differ in primary subject matter in that Passage 2

A. discusses national matters while Passage 1 focuses on individual matters
B. focuses on border management while Passage 1 discusses intelligence determinants
C. argues in favor of the spectrum of myriad human traits while Passage 1 informs readers on how certain humans are more intelligent
D. concentrates on the reproductive system and Passage 1 covers all organs
E. discusses which species will survive while Passage 1 offers an explanation for the distinction between humans

The first passage was written by Lamarck, who was a naturalist that proposed arguments on “inherited traits.” In Passage 2, “country” was just used to provide a metaphorical example and is not primarily concerned with borders, nor is Passage 1 primarily concerned with intelligence (eliminate A and B). Choice C is inaccurate as the author of Passage 2 does not cover many traits and Passage 1 is just using intelligence for an example, nothing more. Choice D incorrectly focuses on the anatomy side of biology with respect to a reproductive and organs, as opposed to the concepts on evolution as Choice E indicates. Choice E is best.

14. The authors both adapt an attitude and tone that could be described as

A. didactic
B. intuitive
C. anachronistic
D. pretentious
E. mundane

Each of these authors, with suppressed enthusiasm about their discoveries and understandings, are sharing with the reader what would have then been revolutionary ideas. In these specific passages, the authors are using elementary terms and a graduated logic process in order to teach the reader. Such a question requires a fairly strong vocabulary background or etymology (the study of the history of words) background. Choice A, didactic, is correct because this essentially means “instructive.” However, what if you didn’t know all the word meanings? Try to eliminate what you can based on what you know. Intuitive you may know means “instinctive” and these scientists certainly had to do far more research and work than just rely on instinct. Also, “-chron” typically has to do with time, and because “anachronistic” means out of date, this is not the correct tone/attitude word. If you have watched a lot of daytime talk shows or soap operas…you may be familiar with the word “pretentious” which means to assume worldliness or intelligence. Lastly, mundane is “commonplace” which is exactly what these breakthrough revelations were not. Choice A is correct.
15. Which of the following choices describes the author's intent in using the sentence “Let it be remembered how powerful the influence of a single introduced tree or mammal has been shown to be.”

A. To prove to their reader that plants and animals can affect humans more than we think
B. To convey how singular objects in nature can set off a number of other events
C. To commemorate the lost entities of the forest amidst problems from natural selection
D. To demonstrate how foreigners could disrupt the balance of life
E. To show how the reproductive system is connected to plant and animal life

Before using this supporting sentence, the author Darwin refers to how a country that opens up its borders may see that the foreigners “disturb the relations of some of the former inhabitants.” Therefore, choice D accurately represents Darwin’s intention for referring to parts of nature that affect the cycle of life.

C. Passage 1 discusses how an individual himself can control which organs become stronger based on his allocated use, where as Passage 2 presents a case for how the community shapes the individual and certain environmental changes can affect an individual.

D. Passage 2 confutes the idea that the human is controlled by the environment, where as Passage 1 discusses how the individual’s use of certain organs allows him to shape his own fate.

E. Passage 1 teaches the reader how to develop certain organs for intentional strength, while Passage 2 presents a case for developing strength through intentional reproduction.

Choice C is correct. Passage 1 is all about using certain organs for a certain time and amount of exercise, and then seeing a corresponding amount of strength. So if you think hard often, your brain will strengthen… but if you neglect your brain, well you know what happens. In Passage 2 the writer describes how minor changes in the environment can lead to significant effects on the individuals in that environment.

16. In which of the following ways do the two passages differ the most?

A. Passage 1 was written by an arrogant man who believed himself to be the most intelligent, whereas the author of Passage 2 refers to himself as a mere tree.
B. Passage 1 focuses on the individual’s control of himself, whereas Passage 2 directly attacks Passage 1’s ideas.
C. Passage 2 confutes the idea that the human is controlled by the environment, whereas Passage 1 discusses how the individual’s use of certain organs allows him to shape his own fate.
D. Passage 2 presents a case for how the community shapes the individual, whereas Passage 1 presents a case for using certain organs for intentional strength.
E. Passage 1 teaches the reader how to develop certain organs for intentional strength, while Passage 2 presents a case for developing strength through intentional reproduction.

Choice D is correct. Passage 2 presents a case for how the community shapes the individual and certain environmental changes can affect an individual.

17. Which aspect of society seems particularly important in Passage 2 but not in Passage 1?

A. self-determinism
B. individual survival qualities
C. interdependence
D. varying conditions and individual desires
E. human progress
The correct choice is C. interdependence. While Passage 2 discusses at length the effects of a climate, border or other major change in society, Passage 1 simply allows one intelligent individual to supersede his less intelligent peer. Passage 1 does not consider the effects of having a less intelligent individual in society or any consequences beyond immediate individual suffering. Choice C separates these two passages.
18. The author of Passage 2 would support which of the following statements?

A. Members of natural environments are loosely connected and often roam independently.
B. It would be preferable to see improvements in the original members of society than bring in outsiders from beyond the borders. C. Variability is an insignificant concept to natural selection; reproduction is of utmost importance. D. Great physical change is critical to natural selection. E. Natural selection favors the weak members of society.

Choice B is correct because it captures what the writer’s intention was when referring to foreigners as “intruders” and helpful “modifications.” Clearly by calling outsiders “intruders” there is a negative connotation, implying that such people are not on their rightful land. Throughout Passage 2 the writer is favoring the betterment of the inhabitants (rather than the introduction of outsiders) so as to progress with natural selection. Choice B is correct.

19. The authors of both passages are most likely to agree that their hypotheses are further by the

A. analysis of the violent and sudden external extinction of dinosaurs
B. discovery of fossils that allow humans to date existence back by millions of years ago
C. biological recovery of sperm cells and other reproductive fragments from hundreds of years ago
D. gradual disappearance of the appendiceal vestiges in humans
E. the increase in muscle strength through playing sports

Choice D is correct because by not using an organ it gradually weakens (Passage 1) and as Darwin claims, our bodies adapt to the conditions of our environments (Passage 2). Choice A is irrelevant, B does not provide specifics on adaptations, C only focuses on the reproductive mentions in Passage 2 and choice E is too concentrated on the ideas in Passage 1.
SECTION 9: MATH

Directions: For this section solve each problem and select the best answer choice. Fill in the corresponding circle on the answer sheet. You may use any available space for scratchwork.

Notes

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

Reference Information

- \( \pi = 3.14159265359 \)
- \( A = \pi r^2 \)
- \( C = 2\pi r \)
- \( A = \ell w \)
- \( A = \frac{1}{2}bh \)
- \( V = \ell wh \)
- \( V = \pi r^2h \)
- \( c^2 = a^2 + b^2 \)
- Special Right Triangles

The number of degrees of arc in a circle is 360.
The sum of the measures in degrees of the angles of a triangle is 180.

1. If \( f(1) = 0 \) and \( f(5) = 24 \), which of the following could be \( f(x) \)?
   A. \( x^2 - 1 \)
   B. \( x - 1 \)
   C. \( -x + 1 \)
   D. \( 5x - 1 \)
   E. \( 4x + 4 \)

Answer Explanations:
To get this answer, we have to try both \( x \) values (1 and 5) and see if they both work for \( f(x) \). Choice A is the one that accomplishes this.

A. Correct
B. This works for \( f(1) \), but not for \( f(5) \).
C. This works for \( f(1) \), but not for \( f(5) \).
D. This works for \( f(5) \), but not for \( f(1) \).
E. This works for \( f(5) \), but not for \( f(1) \).
SECTION 9: MATH

2. In the figure above, which of the following points lies within the circle?

A. (0, 3)
B. (3, 1)
C. (−3, 0)
D. (−1, 1)
E. (−1, −3)

Answer Explanations:
The equation of this circle is $x^2 + y^2 = 9$. If $x^2 + y^2$, using any of the responses, is less than 9, the point is inside the circle. The only point that does this is (−1, 1) – choice D.

A. The point is on the circle, as $x^2 + y^2 = 9$.
B. The point is outside the circle, as $x^2 + y^2 > 9$.
C. The point is on the circle, as $x^2 + y^2 = 9$.
D. Correct
E. The point is outside the circle, as $x^2 + y^2 > 9$.

3. Two pounds of sugar are required to make a tray of apple turnovers. How many pounds of sugar are needed to make enough turnovers to fill 9 boxes, if each box can hold $1\frac{1}{3}$ trays?

A. 12
B. 24
C. 18
D. $\frac{8}{3}$
E. $20\frac{2}{3}$

Answer Explanations:
The function used to model this situation is $f(x) = 2x$, where $x$ is the number of trays. Since $x = 9$ boxes $\times 1\frac{1}{3}$ trays per box $= 12$ trays, we can find the pounds of sugar by multiplying 12 by 2 to get 24 (response B).

A. This is number of trays $= 9 \times 1\frac{1}{3}$.
B. Correct
C. This is $2 \times 9$.
D. This is $2 \times 1\frac{1}{3}$.
E. This is $(9 + 1\frac{1}{3}) \times 2$. 
SECTION 9: MATH

4. What is the midpoint of the line segment connecting the points (−2, 6) and (3, −8)?

A. (1, −2)  
B. (−0.5, −1)  
C. (0.5, 1)  
D. (5, −14)  
E. (0.5, −1)

**Answer Explanations:**

Calculating a midpoint is nothing more than taking the average of the x’s and the average of the y’s! The average of the x’s is (−2 + 3)/2 = 0.5, and the average of the y’s is (6 + (−8))/2 = −1. Putting both of these results together, we get (0.5, −1) – choice E.

A. The midpoint is not simply the sum of both coordinates.  
B. The x difference was incorrectly calculated as −1.  
C. The y difference was incorrectly calculated as 2.  
D. The midpoint is not the difference of both coordinates.  
E. Correct

5. \[
\frac{2x^2−9x+10}{x^2+5x−14} =
\]

A. The expression cannot be simplified.  
B. \(\frac{x−5}{x+7}\)  
C. \(\frac{2x+5}{x−7}\)  
D. \(\frac{x−2}{2x−5}\)  
E. \(\frac{2x−5}{x+7}\)

**Answer Explanations:**

When we factor this quadratic fraction, we get \(\frac{(2x−5)(x−2)}{(x+7)(x−2)} = \frac{2x−5}{x+7}\). This is answer E.

A. Yes, it can be simplified!  
B. This response has an incorrect factor in the numerator – the correct factor is 2x − 5.  
C. There are incorrect signs in the numerator and denominator.  
D. There is an incorrect factor in the numerator.  
E. Correct
6. If you are standing 40 feet from the side of a building and the angle to the top of the building is 50°, find the height, h, of the building to the nearest hundredth.

A. 47.67  
B. 30.64  
C. 25.71  
D. 62.23  
E. 52.22

**Answer Explanations:**

Correct answer: A

The two sides we have information about are adjacent (next to) and opposite the angle. When we have opposite and adjacent sides, we use the tangent function.

\[
\text{Tangent of an angle} = \frac{\text{opposite}}{\text{adjacent}}
\]

Plugging in gives \(\tan 50° = \frac{h}{40}\)

Multiplying the 40 to the left side and using the calculator gives \(47.67 = h\), which is the solution.

Incorrect answers could result from using the wrong trigonometric function for the situation or dividing by 40 or \(\tan 50\) instead of multiplying.
7. Find the height, BD, of Isosceles triangle ABC if mAC = 4 and m<ABD = 25°. Round to the nearest hundredth.

A. .85  
B. 1.81  
C. 4.29  
D. 4.73  
E. 2.21

Answer Explanations:

Correct answer: C

Since AC = 4, we know that AD = 2. AD is the side opposite the angle given and we want to find the side adjacent to it. This means we must use the *tangent* function.

Tangent of an angle = (opposite) ÷ (adjacent)

The setup is $\tan 25^\circ = \frac{2}{BD}$

Multiplying BD to the left gives $(BD) \tan 25^\circ = 2$

Then we divide by tan 25, which gives $BD = \frac{2}{\tan 25^\circ}$

Using a calculator gives BD = 4.29.

Incorrect answers could result from using the wrong trigonometric function for the situation or multiplying by 2 or tan 25 instead of dividing.
8. Find $m_{AC}$ if isosceles triangle ABC has $m_{\angle ABD} = 18^\circ$ and $m_{BD} = 14$. Round to the nearest tenth.

A. 9.1
B. 8.7
C. 26.6
D. 29.4
E. 4.5

**Answer Explanations:**

Correct answer: A

We are given the side adjacent (next to) the angle and want to find the side opposite the angle. To start, we can only find AD, not AC. We’ll use the tangent function.

\[
\text{Tangent of an angle} = \frac{\text{(opposite)}}{\text{(adjacent)}},
\]

The setup is

\[
\tan 18^\circ = \frac{AD}{14}
\]

Multiplying the 14 to the left side gives $4.55 = AD$. We have to double that number to get AC, so we find that $AC = 9.1$.

Incorrect answers could come from using the incorrect trigonometric function or forgetting to double the answer (especially since 4.5 is an answer choice – if you are not careful, it can be easy to mistakenly choose that answer).
SECTION 9: MATH
9. Between what values of $x$ is $f(x)$ constant?

A. $-4$ to $1$
B. $1$ to $3$
C. $3$ to $5$
D. $1$ to $5$
E. $-4$ to $5$

**Answer Explanations:**

Correct answer: B

A graph is constant if it is just a horizontal line. The only horizontal section of the graph is the dark blue section between $x = 1$ and $x = 3$. 

__________________________
10. \( \overline{AB} \) is tangent to circle O. If \( \angle AOB = 62^\circ \), what is the measure of \( \angle ABO \)?

A. 62°  
B. 28°  
C. 118°  
D. 90°  
E. 18°

**Answer Explanations:**

Correct answer: B

Since line \( AB \) is tangent to the circle, every time a tangent line touches a radius, they form a right angle. Therefore, the triangle in the figure is a right triangle.

We know, then, that the other two angles have to add up to 90°. If one angle is 62°, then the other equals \( 90^\circ - 62^\circ = 28^\circ \).
11. $\overline{AB}$ is tangent to circle O. If $m_{AB} = 12$ and the radius of the circle is 5, find $m_{OB}$.

**Answer Explanations:**

Correct answer: A

Since line AB is tangent to the circle, every time a tangent line touches a radius, they form a right angle. Therefore, the triangle in the figure is a right triangle.

We can use the Pythagorean Theorem to find OB (which is the hypotenuse of the triangle.)

The Pythagorean Theorem is $a^2 + b^2 = c^2$ (a and b are the shorter sides, c is the hypotenuse)

Plugging in what we know gives $5^2 + 12^2 = c^2$

Adding gives $169 = c^2$

Taking the square root gives $13 = c$. 

SECTION 9: MATH

12. What is the mode of the following test scores?

75  82  94  92  88  92  70

A.  70  
B.  85  
C.  82  
D.  88  
E.  92  

**Answer Explanations:**

Correct answer:  E

The mode is the number that shows up the most times. In this case, 92 is the only number that appears more than once.
13. Students at a particular high school can choose to take either Spanish or French. The choices made by 1000 students at that school were organized into the following chart:

<table>
<thead>
<tr>
<th></th>
<th>Spanish</th>
<th>French</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>260</td>
<td>240</td>
<td>500</td>
</tr>
<tr>
<td>Female</td>
<td>200</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>Total</td>
<td>460</td>
<td>540</td>
<td>1000</td>
</tr>
</tbody>
</table>

What is the probability that a randomly selected student chose French given that the student chosen was a male?

A. 60%
B. 48%
C. 42%
D. 40%
E. 24%

**Answer Explanations:**

Correct answer: B

The problem forces us to assume we are only dealing with the males surveyed because of the phrase “given that the student chosen was a male.” That assumption comes first, before we do any actual work with the problem.

There are 500 males included in the survey. Of those, 240 chose French. To find the probability, find $240 \div 500 = 0.48$

This means that 48% of the males at the school (that were included in the data) took French.

Incorrect answers: Be careful not to assume this question is asking “What percentage of students were male and chose French?” That would mean finding $240 \div 1000 = 0.24$ and ending up with choice E. The wording can be tricky in probability problems. This problem is only asking us to consider the Males.
SECTION 9: MATH

14. Students at a particular high school can choose to take either Spanish or French. The choices made by 1000 students at that school were organized into the following chart:

<table>
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</tr>
<tr>
<td>Total</td>
<td>460</td>
<td>540</td>
<td>1000</td>
</tr>
</tbody>
</table>

If there are really 2500 students at the school and assuming all probabilities remain the same, how many students can be expected to enroll in French?

A. 1350  
B. 1250  
C. 1150  
D. 1050  
E. 540

**Answer Explanations:**

Correct answer: A

The probability that a student will take French (as shown by the table) is 540 ÷ 1000 = 0.54

That means that we can expect 54% of the 2500 students at the school to take French. Multiplying gives us 0.54 x 2500 = 1350.
15. A study regarding students’ favorite ice cream flavors is conducted at a particular middle school. Of 320 students interviewed, the following data was collected:

<table>
<thead>
<tr>
<th></th>
<th>Vanilla</th>
<th>Chocolate</th>
<th>Strawberry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>40</td>
<td>75</td>
<td>35</td>
<td>150</td>
</tr>
<tr>
<td>Girls</td>
<td>80</td>
<td>60</td>
<td>30</td>
<td>170</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>135</td>
<td>65</td>
<td>320</td>
</tr>
</tbody>
</table>

How many people interviewed were boys or preferred vanilla?

A. 270  
B. 230  
C. 150  
D. 120  
E. 40

**Answer Explanations:**

Correct answer: **B**

This is tricky because you can’t just add the total number of boys and the total number of people who chose Vanilla. Doing this would give you 120 + 150 = 270. The problem is that this method has you count the “boys who favor vanilla” category both times!

There are two ways to fix this.

1. Realize that adding the totals causes you to add the 40 boys that favor vanilla twice and, to fix it, just subtract 40 from the 270 total, leaving 230.

2. Method 2 is to NOT use the totals, but instead, add up each individual box in the boys row and the vanilla column. This gives 40 + 75 + 35 + 80 which still equals 230.
16. A dartboard is made from four concentric circles. The radii of the circles, from largest to smallest are 4, 3, 2, and 1 ft. What is the probability that a dart thrown at the board will hit a shaded region?

The tricky part is finding the area of the shaded ring, so let’s start there. The area of the ring is equal to the area of the circle with $r = 3$ (that’s pretty much the ring itself) minus the area of the circle with $r = 2$ (which includes both the unshaded inner ring and the shaded circle in the middle).

The area of the $r = 3$ circle is $A = \pi r^2 = \pi (3^2) = 9\pi$.
The area of the $r = 2$ circle is $A = \pi r^2 = \pi (2^2) = 4\pi$.
Subtracting their areas gives $9\pi - 4\pi = 5\pi$.
So, the area of the shaded ring is $5\pi$.

Next, the area of the small shaded circle with $r = 1$ is $A = \pi r^2 = \pi (2^2) = 4\pi$.
Adding the areas of the two shaded regions gives $5\pi + 1\pi = 6\pi$.
Lastly, the area of the largest circle with $r = 4$ is $A = \pi r^2 = \pi (4^2) = 16\pi$.

To find the probability, divide the shaded area by the whole area.

So, we have $\frac{\text{shaded}}{\text{whole}} = \frac{6\pi}{16\pi} = \frac{6}{16} = \frac{3}{8}$.
1. The United States of America has grown out of a fledgling democratic experiment to one of the most powerful and exemplary nations in the world today.

A. has grown out of a fledgling democratic experiment
B. have grown out of a fledgling democratic experiment
C. have grown from a fledgling democratic experiment
D. has grown from a fledgling democratic experiment
E. has been continuously growing into a fledgling democratic experiment

The correct choice is D. This question tests the essential idiom “grown from…to…” as opposed to “grown out of… (into...).” As one may grow out of clothes, the USA has not grown out of an experiment. It has grown from being just an experiment to becoming a superpower of the world. Therefore, choices A and B may be eliminated. Choices B and C incorrectly use the plural form of a verb (i.e. have). The United States is a single nation and so it is incorrect to use verb forms such as “have” “are” and “grow” unless you are referring to several states of the nation (For example, “New Jersey, New York and

2. After considering the future of the economy and reviewing several companies’ reports, Carlos decided to invest in the stock market.

A. companies’ reports, Carlos decided to invest with the stock market.
B. company’s reports, Carlos decided to invest in the stock market.
C. companies’ report, Carlos decided to invest in the stock market.
D. companies’ reports, Carlos was invested in the stock market.
E. companies’ reports, Carlos decided to invest in the stock market.

The correct choice is E. The essential idiom that this question tests is “invest in.” Despite conversational language and some advertisements, this is the correct way to refer to investments. Therefore, the idioms in choices A, C and D are incorrect. Choice D also
SECTION 10: WRITING

uses an improper tense form (i.e. was invested) and changes the meaning of the sentence. Choice B demonstrates a disagreement of the noun “company.” The sentence definitely refers to “several” companies; therefore, one cannot use the singular form of “company. Only choice E uses the correct form of the noun, the correct tense of the verb, and the proper essential idiom.

3. As a teenager making his own money and paying for his own car, Dylan wanted to gain independence of his parents.

A. wanted to gain independence of his parents.
B. wanted to gain independence from his parents.
C. wanted to be independent of his parents.
D. wanted to gain independence by his parents.
E. wanted to gain independence out of his parents.

The correct choice is B. This question can be tricky as one must be aware of the proper essential idiom which is “independent from.” To gain independence of or to gain independence by may follow some type of logic based on the raw meanings of the word independence and the prepositions that follow, but only “independent from” is correct. Remember, the United States gained independence from Great Britain; the US did not gain independence by or of Great Britain.

4. Endemic plants, such as the natural shrubland vegetation that has always been a part of the Western Cape of South Africa, are native of a certain region.

A. are native of a certain region.
B. is native of a certain region.
C. are native to a certain region.
D. are native in a certain region.
E. is native to a certain region.

The correct response is C. The proper essential idiom to know is “native to.” “Native of” and “native in” are grammatically incorrect in this context. One may eliminate choices A, B and D because of this idiomatic rule. Only choices C and E remain. The sentence begins “endemic plants” so the verb must be plural and “is” proves to be grammatically incorrect. Only choice C is idiomatically correct and uses the proper verb form.

5. Neither football or basketball attract as many viewers as stock car auto racing.

A. Neither football or basketball attract
B. Neither football nor basketball attract
C. Neither football or basketball attracts
D. Neither football nor basketball attracts
E. Either football or basketball attract

The correct choice is D. The proper phrasing is “neither…nor…” To say “neither…or….” or “either…nor…” are both incorrect. Some choices also use the plural form of “to attract”
SECTION 10: WRITING

when the singular form should be used instead. Two sports are referred to (i.e. football, basketball), but the use of “neither...nor...” refers to each object individually. The verb form must reflect this rule. Based on proper phrasing of “neither...nor...” and verb forms (plural vs. singular), choices A, B, C and E may be eliminated. Only choice D remains to be correct.

6. By registering with INAP, the intelligent student gained access to countless features designed to improve her SAT score.

A. access to countless features designed to improve her SAT score.
B. access of countless features designed to improve their SAT score.
C. access of countless features designed to improve her SAT score.
D. access to countless features designed to improve their SAT score.
E. access for countless features designed to improve her SAT score.

The correct choice is choice A. The sentence is correctly written because it uses the proper idiom (i.e. access to) and the proper singular possessive pronoun (i.e. her). The use of “access of” and “access for” are both incorrect which allows one to eliminate choices B, C, and E. Choices B and D also use incorrect pronouns (i.e. their) due to the definite need for a singular pronoun because of the use of “student” and not “students.” Only the original sentence is correct.

7. Some people believe that a progressive tax system is superior than a flat tax system because it encourages economic equity by taxing high earners more money.

A. system is superior than a
B. system is superior of a
C. system are superior to a
D. system are superior than a
E. system is superior to a

The correct choice is E. The proper English idiom is “superior to” just as it is “inferior to.” With this in mind, one can eliminate the improper idioms in this context such as “superior than” and “superior of.” Also there is a disagreement in verb form. The verb “to be” should be singular as it refers to the singular object of a tax system so the use of “are” is incorrect. Only choice E correctly uses “superior to” and the proper form of “to be.”

8. When the mother heard her young child crying, she immediately upstairs to attend to her needs.

A. attend to her needs.
B. attend at her needs.
C. attend her needs.
D. attend the child’s needs.
E. attend to the child’s needs.

The correct choice is E. The correct idiom is “attend to” which allows one to eliminate choices B, C, and D. Also, the use of “her” is ambiguous because although logic implies that the mother is attending to her child’s needs, this must be clarified in order
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to be grammatically correct. Eliminate choice A because it is ambiguous. Only choice E is unambiguous and idiomatically correct.

9. The Inside Passage between the Alaska Panhandle and British Columbia offers native and commercial sailors the opportunity to avoid the rough weather conditions of the broad ocean area, the passage also provides tourists with an opportunity to see the isolated communities of the region.

A. ocean area, the passage also provides tourists
B. ocean area; the passage also provides tourists
C. ocean area; the passage also provides for tourists
D. ocean area; therefore, the passage also provides tourists
E. ocean area, but the passage also provides for tourists

The correct choice is B. The sentence is a run-on sentence without a semi-colon to separate the independent ideas. A proper idiom is “provides…with…” and only choices A, B, and D use this correctly. Yet choice A makes the sentence a run-on sentence while choice D incorrectly uses the conjunction “therefore.” The sailors’ use of the Passage does not cause the tourists’ scenic route. “Therefore” should only be used in cause-effect sentences where there is an apparent relationship between the events. Only choice B corrects the run-on sentence while also using the proper phrasing.

10. When Ashley visited Australia during the summer, she was visiting relatives, went sight-seeing and went scuba-diving.

A. summer, she was visiting relatives, went sight-seeing,
B. Summer, she was visiting relatives, went sight-seeing,
C. summer, she was visiting relatives, going sight-seeing
D. Summer, she visited relatives, went sight-seeing,
E. summer, she visited relatives, went sight-seeing

The correct choice is E. The sentence is testing for parallelism. The simple past tense must be used as indicated by “went scuba diving” and this is why the original sentence is incorrect for using “she was visiting relatives” which is the past progressive or imperfect tense. Also the sentence tests capitalization as summer should not be capitalized as none of the seasons should be capitalized. With the two rules of parallelism and capitalization in mind, one can eliminate choices A, B, C and D. Only choice E follows parallel structure and correctly capitalizes.

11. After Emma found out that her family would be moving during the fall, she became depressed, confused and felt angry.

A. confused and felt angry.
B. confused and angry.
C. was confused and angry
D. confusing and angrily.
E. confuse and anger.
The correct choice is B. This question tests for a consistency, which sometimes looks for consistent use of verbs or adjectives. In this sentence there must be a consistent use of adjectives or descriptions because the sentence will definitely include “depressed.” Only choice B with the adjectives of “confused” and “angry” maintain this law of consistency.

12. High school teachers often tell students, “If one takes thorough notes and pays attention when I lecture, then you will be successful in my class.”

A. you will be successful in my class.
B. you will be successful in our classes.
C. one will be succeeding in our classes.
D. one will be successful in my class.
E. one was successful in my class.

Choice D is the correct selection. The original sentence does not demonstrates subject-verb agreement. The clause “leading all of her babies” is just meant to describe the mother goose but it does not replace the mother goose as the subject. The subject of the verb “to swim” is the mother goose not the babies. Therefore, choices A and E are incorrect. Choices B and C use the wrong form of the verb. The verb cannot be in the simple past tense or the infinitive form because of the clause that indicates the progressive form (i.e. leading). Only choice D remains.

13. The mother goose, leading all of her babies, were swimming across the pond.

A. were swimming across the pond.
B. swam across the pond.
C. to swim across the pond.
D. was swimming across the pond.
E. have swam across the pond.

The correct choice is D. This question tests parallelism of pronouns. Since “one” is used in the first clause of the sentence, the same pronoun, or form of pronoun, must be used in the second clause. Choices A and B are incorrect because the change the pronoun to “you” in the command form. Choices B and C are also incorrect because the first clause includes a teacher referring to when he or she “lectures” as opposed to a number of teachers lecturing so the second clause should include “my class.” Choice E uses the past tense with “was” when either the present or future tense must be used because this sentence is a generalization about present times. Only choice D is in the proper tense and follows parallel structure.
14. A minority of the American population vote during election years either because of current legal restrictions or personal indifference.

A. vote during election years  
B. votes during election years  
C. votes on election years  
D. vote on election year  
E. voted during election years

The correct choice is B. The verb “to vote” is referring back to a singular, collective noun (i.e. minority). Although “minority” represents a number of people, it is a collective noun which means that it corresponds to singular nouns, such as “votes” in this context. Also, one may vote on election day but one does not vote “on” election year. Finally, the verb form “voted” in the past tense is incorrect due to the use of “current” in the sentence which means that the action cannot be restricted to the past in this context. Only choice B has the proper verb form and is grammatically sound.