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Comprehension Monitoring

Comprehension monitoring is the ability of a reader to be aware, while reading, whether a text is making sense or not.

Your reading level is **never** static. It can fluctuate and change based upon your personal engagement with the text. A strong reader adjusts their reading style to comprehend material that is more difficult, such as slowing down or re-reading.

The best way to practice your comprehension monitoring skills is to force yourself to re-read sentences or paragraphs at a slower pace when you don't understand them.

Exercise

Monitor your comprehension on this text: Quickly summarize the paragraph after reading through it the first time. Then, read it a second time and write a new summary and note what you missed on the first read-through.

Hamilton, Alexander. Federalist No. 1

The Federalist (later known as The Federalist Papers) is a collection of 85 articles and essays promoting the ratification of the United States Constitution.

To the People of the State of New York:

After an unequivocal experience of the inefficiency of the subsisting federal government, you are called upon to deliberate on a new Constitution for the United States of America. The subject speaks its own importance; comprehending in its consequences nothing less than the existence of the UNION, the safety and welfare of the parts of which it is composed, the fate of an empire in many respects the most interesting in the world. It has been frequently remarked that it seems to have been reserved to the people of this country, by their conduct and example, to decide the important question, whether societies of men are really capable or not of establishing good government from reflection and choice, or whether they are forever destined to depend for their political constitutions on accident and force. If there be any truth in the remark, the crisis at which we are arrived may with propriety be regarded as the era in which that decision is to be made; and a wrong election of the part we shall act may, in this view, deserve to be considered as the general misfortune of mankind.

First Summary:

Second Summary:

32

Based on the passage, proponents of the nondeterministic view of the cultural marketplace would most likely agree with which statement about commercially successful cultural products?

- A) They share few characteristics with unsuccessful cultural products.
- B) They better reflect the tastes and interests of the public than do unsuccessful cultural products.
- C) They are marketed more enthusiastically than are unsuccessful cultural products.
- D) They may not be of greater quality than are unsuccessful cultural products.

33

Information provided in lines 24-27 (“For their . . . heard of”) helps to defend the researchers’ work from which potential criticism?

- A) The data reveal how people behave in an artificial world but not necessarily how people behave in the real world.
- B) The results are influenced by participants’ prior attitudes toward the bands rather than by popularity rankings or intrinsic quality.
- C) The musical tastes of the participants in the intrinsic quality world may not be reflective of the musical tastes of the participants in the other worlds.
- D) The fact that participants favored songs that were already popular does not mean that those participants’ true preferences were for other, less popular songs.

37

According to the graph, what happened after Song B was presented to half the new participants as the most downloaded song?

- A) Song A and Song B underwent a drop in the rate at which they were downloaded.
- B) Participants stopped downloading Song A for most of the remainder of the experiment.
- C) There was an evident increase in the number of times Song B was downloaded.
- D) Participants who saw the true popularity rankings nevertheless began to favor Song B over Song A.

34

As used in line 44, “agreed with” most nearly means

- A) shared the view of.
- B) compromised with.
- C) been suitable for.
- D) coincided with.

35

It can most reasonably be inferred that in the eight worlds where the number of downloads was visible, songs that became popular near the beginning of the experiment tended to

- A) remain popular for the duration of the experiment.
- B) be popular in a majority of those eight worlds.
- C) drop in popularity near the end of the experiment.
- D) have lower intrinsic quality ratings than songs that were not popular.

36

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

- A) Lines 32-34 (“All the . . . independently”)
- B) Lines 45-50 (“But the . . . their popularity”)
- C) Lines 50-54 (“For example . . . another”)
- D) Lines 54-56 (“In this . . . shoppers”)

38

The marketing executives described in the passage would most likely attribute the difference seen in the graph in the number of downloads of Songs A and B when 500 subjects had joined the world to

- A) the effect of chance influences on the reception of both songs.
- B) the ease with which participants could categorize both songs.
- C) Song B’s similarity to other popular songs.
- D) the higher intrinsic quality of Song A.

STOP

WRITING AND LANGUAGE

The SAT Writing and Language section is 35 minutes long and consists of 44 questions spread across 4 passages. This section focuses on both the correct use of grammar and the clear articulation of ideas and language. The score from this passage will combine with Reading to provide your Evidenced-Based Reading and Writing score.

STRATEGY

Resist the urge to jump to where the questions are in the passage. You **MUST** read the entire passage and the best strategy is to answer the questions as they come. It's important to have an overall feel and good knowledge of each passage so that you can answer the tone and logic questions appropriately - starting at the beginning and working your way through to each question will ensure that you build an understanding of the bigger picture.

LANGUAGE

Sentence Structure

What is a sentence? You'd be surprised how few students can adequately answer that question, because the answer is surprisingly complex. We're going to start simple, with clauses.

I. The **subject** is the part of the clause about which we have something to say.

The **door** slammed in his face.

Exercise

Circle the subject of these clauses:

1. The curves of your lips rewrite history.
2. After dinner, the werewolf had a toothache.
3. Achilles' flung spear whistled over Hector's shoulder.
4. Then came the fight to the death.
5. Something is rotten in the state of Denmark.

It is important to note that in general subordinating conjunctions are not offset by commas, but transitioning words or phrases are because they are technically non-essential. Additionally, remember that **you CANNOT use a subordinating conjunction or a transitioning word in place of a coordinating conjunction to form a compound sentence.**

Exercise

Write a sentence beginning with the subordinating conjunction and using the word *storm*.

Example: Because of the storm last night, we had to stay in.

11. Since...

12. Although...

13. Whenever...

14. After..

15. If...

<u>Common Subordinating Conjunctions</u>	
After	Once
As	When
Although	Since
As if	So that
Because	Than
Before	Where
Until	That
If	Though
In order that	Unless
Regardless	Whereas
Even though	While

Restrictive Clauses

If you're going to determine whether or not something is non-essential information you also need to be able to identify a restrictive clause. A restrictive clause is a clause that is essential to the meaning of the sentence, and therefore is not separated by commas.

All students who do their work should pass.

Who do their work is an essential clause and not separated by commas. The meaning of the sentence changes significantly if we remove it.

All students should pass.

The big question here is why? Why should all students pass? It really doesn't make any sense unless it is qualified by the clause *who do their work*.

Sentence Ordering

A particular variation of a ‘Rhetorical Skills’ question is “sentence ordering.” These questions ask you to place a sentence into its proper place within a paragraph. Other times, the test will offer a new sentence and ask where it belongs.

The key to success is identifying the *criteria* for correct placement, considering your limited options for placement, and asking yourself how each placement may change the logical flow and meaning of the paragraph. Consider the paragraph below and the question.

[1] A four-year study by a team of Canadian scientists, headed by student Laura McKinnon of the Université du Québec, **16** provide evidence in support of this hypothesis. [2] The scientists created artificial nests that resembled a typical shorebird’s nest. [3] Then each year, during the shorebirds’ breeding season, forty of the nests were placed in each of seven locations that ranged in latitude from the low Arctic to the high Arctic.

[4] Each nest had been baited with four **17** quail egg’s, which are similar in size and shape to a shorebird’s eggs.

[5] The scientists returned to the nests many times over nine days to check how many eggs remained in the nests.

[6] A nest was said to have survived if, at the end of the nine days, it contained at least one undisturbed quail egg.

18**18**

To make this paragraph most logical, sentence 5 should be placed

- A) where it is now.
- B) after sentence 1.
- C) after sentence 2.
- D) after sentence 6.

1) Read the sentence in question (e.g. sentence 5)

2) Now consider, what should come before this sentence and what should come after? In the example above, the wording essentially requires that “sentence 5” follow a sentence about “nests,” and it might need a sentence that follows that explains the scientists returning and checking.

3) Look at your answers, you only have 4 options and they tell you where to look. Check them one by one and see if they create any problems, such as pronouns without antecedents or references to information later in the paragraph.

4) Possibly most important of all, when ordering sentences and looking at your answer options, think about what is created by adding or removing within the paragraph and existing sentences. Don’t just focus on what would come before the sentence that you end up moving around. For example, does moving sentence 5 in between sentence 1 and 2 help the logic and clarity of the paragraph, or make it worse? Likewise, what happens if sentence 4 flows right into sentence 6 without 5 in between?

PERCENTAGES

Remember that as a pure concept a percentage is “part/whole.” Problems will likely be more complicated than that simple ratio, but at the heart of it a percentage is merely a specific relationship between two numbers. Converting percentages to decimals in order to do calculations should be second nature for anyone taking the SAT. Just move the decimal place two positions to the left to convert a percentage to a decimal, and vice-versa to go back to a percentage. For example, 5% is 0.05 as a decimal; and 0.23 is 23% as a percentage.

4 Types of Percentage Problems

Type 1: Taking one percentage

In a situation where there is only one percentage being calculated, simply convert the percentage into a decimal and multiply. This is the easiest type of percentage problem.

Q: *What is 43% of 88?*

A: $(0.43)(88) = 37.84$

Type 2: Taking two percentages without the passage of time

Sometimes you will be asked to take two percentages within one problem. If this happens, pay attention to the chronology in the problem. If you are taking the percentages simultaneously, then simply convert all of the percentages to decimals and multiply through.

Q: *What is 32% of 44% of 78?*

A: $(0.32)(0.44)(78) = 10.98$

Type 3: Taking two percentages WITH the passage of time

If time lapses between the two percentages, then you must do the problem in steps. Take the first percentage, then use the result in your second calculation for a percent increase or decrease.

Q: Susan buys skis that are 20% off the retail price of \$600. She then sells them for a 15% profit. How much does she sell them for?

A: $600 - 600(0.2) = 480$:: $480 + 480(0.15) = 552$

After you are fully comfortable with the two-step process it is highly recommended that you adopt a one-step process: in the above example it would be $(600)(0.8)(1.15) = 552$

Type 4: Percent Increase or Decrease

If a problem asks about how to find the percent increase or decrease between two values remember to first find the difference between the original and new value and then divide that result by the original value.

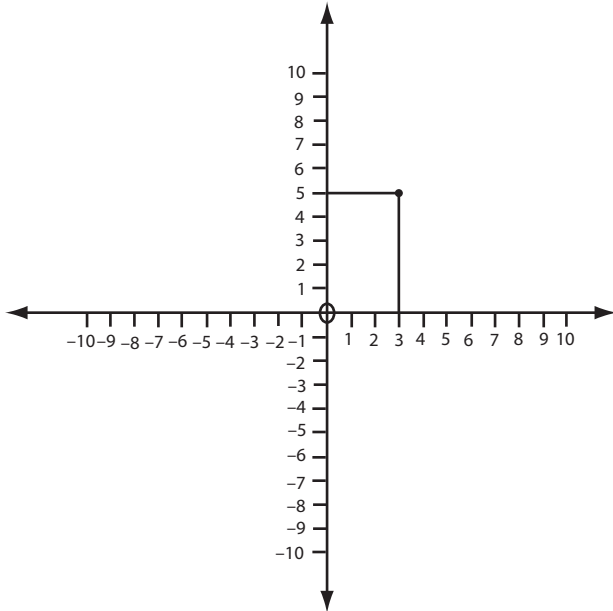
Conceptually, you are comparing the **change** to the **original value**.

Q: If Jim got a bonus of \$1200 last year and this year he got a bonus of \$1800. What is the percent increase of his bonus this year compared to last year?

A: $1800 - 1200 = 600$:: $600/1200 = 0.5$:: So it was a 50% increase in his bonus.

Graphing Linear Equations

Before we move on to other types of equations it is beneficial to discuss graphing in context of linear equations. Most coordinate geometry comes in the form of graphs and “best fit” lines. It’s important to understand those, but it’s also important to know more about graphing on the coordinate plane.



If the end points of a line segment are (x_1, y_1) and (x_2, y_2) , then:

Distance Formula

The distance between two points = $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

Midpoint Formula

The coordinates of the midpoint of the line segment = $\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}$

Slope Formula

The slope of a line = $\frac{y_2 - y_1}{x_2 - x_1}$

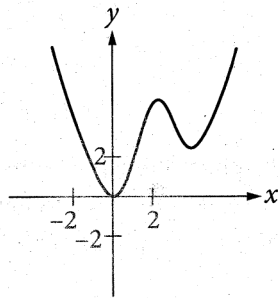
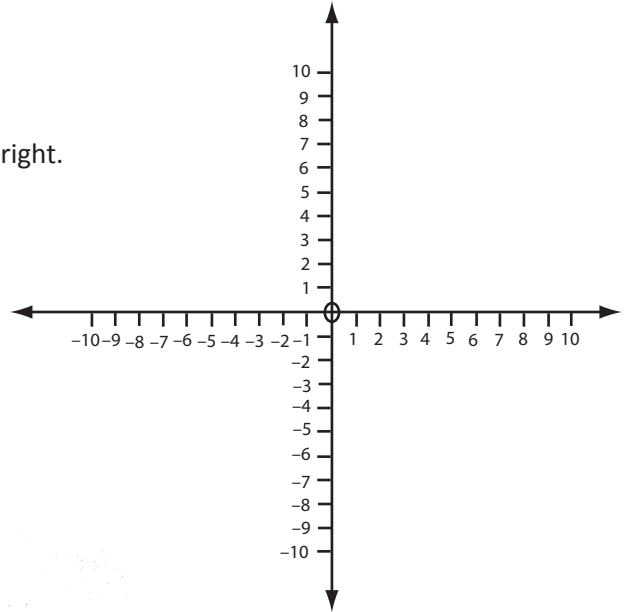
Lines rising in a northeast direction have a positive slope, lines falling in a southeast direction have a negative slope, horizontal lines have zero slope, and a vertical line has an undefined slope. Also, remember that **two lines that are parallel have the same slope** and **two lines that are perpendicular to each other have slopes that are negative reciprocals of each other.**



Similarly, note that putting a negative in front of the squared term in the vertex form flips the parabola so it is open down. And, if you put a coefficient in front of the same term the parabola will increase more quickly, essentially making it visibly narrower. Finally, note that the inverse function $x = y^2$ is open in the direction of the x -axis. Remember, if any of this isn't intuitive you can ALWAYS pick points and graph it so that you can conceptually understand it better!

Practice

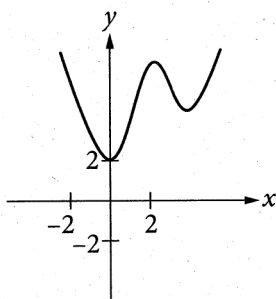
Graph $y = -x^2$, $y = 3x^2$, and $x = y^2$ on the coordinate plane to the right.



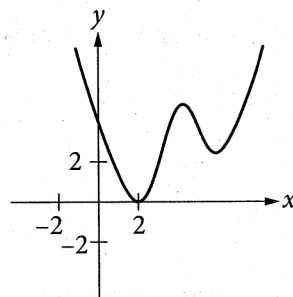
Exercise

- The graph of $y = f(x)$ is shown above. Which of the following could be the graph of $y = f(x) - 2$?

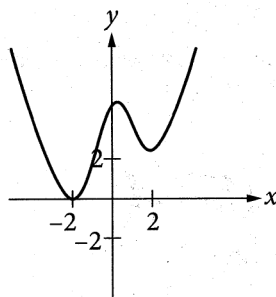
A)



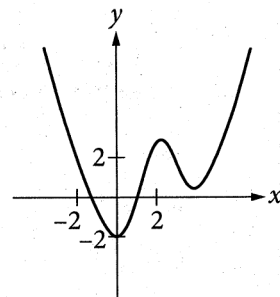
B)



C)



D)



Strategy - Free Response

Remember that on the free response questions that what you write above the bubble doesn't get graded, it's how you actually fill the bubble in. Also note number 6 down below - **If you have a repeating decimal you must fill in all available space, and DON'T USE A ZERO.** In general, it's safest to use fractions: for example, if your answer is $\frac{2}{3}$, it's safe to put $\frac{2}{3}$. If you want to put down a decimal it would have to be ".666" or ".667". If you round to ".68" or put "0.66" you will get NO POINTS.

DIRECTIONS

Questions **16-20** ask you to solve a problem and enter your answer in the grid provided on your answer sheet. When completing grid-in questions:

- You are required to bubble in the circles for your answers. It is recommended, but not required, that you also write your answer in the boxes above the columns of circles. Points will be awarded based only on whether the circles are filled in correctly.
- Fill in only one circle in a column.
- You can start your answer in any column as long as you can fit in the whole answer.
- For questions 16-20, no answers will be negative numbers.
- Mixed numbers**, such as $4\frac{2}{5}$, must be gridded as decimals or improper fractions, such as 4.4 or as $\frac{22}{5}$. "42/5" will be read as "forty-two over five," not as "four and two-fifths."
- If your answer is a **decimal** with more digits than will fit on the grid, you may round it or cut it off, but you must fill the entire grid.
- If there are **multiple correct solutions** to a problem, all of them will be considered correct. Enter only **one** on the grid.

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