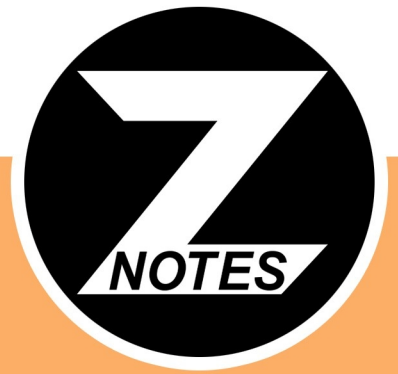


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COLLEGEBOARD SAT I GUIDE

STRATEGIES AND GUIDE FOR THE SAT I TEST

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NOTES

FORMAT OF SAT I

Total Time: 4 Hours and 5 Minutes (including two breaks)	
Section 1: Essay <i>Time—25 minutes</i>	
Section 2: Critical Reading—24 Questions <i>Time—25 minutes</i>	8 Sentence Completion 4 Reading Comprehension (2 short passages) 12 Reading Comprehension (1 long passage)
Section 3: Mathematics—20 Questions <i>Time—25 minutes</i>	20 Standard Multiple-Choice
Break <i>Time—10 minutes</i>	
Section 4: Writing Skills—35 Questions <i>Time—25 minutes</i>	11 Improving Sentences 18 Identifying Sentence Errors 6 Improving Paragraphs
Section 5: Experimental <i>Time—25 minutes</i>	This section can be Critical Reading, Mathematics, or Writing Skills
Section 6: Critical Reading—24 Questions <i>Time—25 minutes</i>	5 Sentence Completion 4 Reading Comprehension (paired short passages) 15 Reading Comprehension (2 long passages)
Break <i>Time—10 minutes</i>	
Section 7: Mathematics—18 Questions <i>Time—25 minutes</i>	8 Standard Multiple-Choice 10 Student-Produced Response (Grid-in)
Section 8: Critical Reading—19 Questions <i>Time—20 minutes</i>	6 Sentence Completion 13 Reading Comprehension (paired long passages)
Section 9: Mathematics—16 Questions <i>Time—20 minutes</i>	16 Standard Multiple-Choice
Section 10: Writing Skills—14 Questions <i>Time—10 minutes</i>	14 Improving Sentences

- Section 1 is always the same
- Sections 2 – 7, which are each 25-minutes long, can come in any order (including the experimental section)
- Sections 8 and 9 are always a 20-minute Mathematics section and Critical Reading section - in either order
- Section 10 is always the 10-minute Writing Skills section

WRITING SECTION**1. ESSAY****1.1 The Essay Writing Process**

- Develop a one-word response to the question/prompt e.g. yes, no or maybe
- Include three personal experiences (make them up) which relate directly to your approach to the prompt.
- Start the essay with a one-sentence statement of your answer to the prompt.
- Write a “though” sentence to contradict your first sentence and then reaffirm it e.g.
 - “Honesty is always the best policy” may be a trite saying, but it holds an enormous amount of truth. Though deception often allows one to escape immediate repercussions, the truth will always emerge.
- Finish the first paragraph with a sentence that gives a strong introduction to your examples e.g.
 - Three episodes from my personal experience serve as compelling examples of this fact.
- Writing the body paragraph (3 paragraphs):
 - Begin with a general statement that introduces your first example
 - Tell the example in 3-5 sentences. Spend time and make sure you include details.
 - Use one or two sentences to relate story to first sentence in essay
- Use a simile in the first paragraph
- Begin final paragraph with a sentence that relates all of your examples back to the first sentence in your essay
- Finish essay with sentence that rephrases first sentence in essay – reinforce initial point made.

2. GRAMMATICAL IDEAS**2.1 Nouns and Pronouns**

- **Nouns:** describe an actual, physical thing (desk), or represent an idea (happiness)
- **Pronouns:** word that replaces noun that has been used e.g. “Thomas wants to know why **he** has to do the dishes”

- **Subjects and objects:** common subjects are pronouns which appear as the subjects of verbs e.g. he, she. These can only be used as subjects e.g. “He gave the present to **she**” is incorrect as “she” must be an object; “He gave the present to **her**”
- **Personal pronouns:** when a pronoun substitutes a noun that indicates a person, it has to be a personal pronoun e.g. “I gave the report to the supervisor that asked me for it” is incorrect as supervisor refers to a person and “that” is not a personal pronoun; “I gave the report the supervisor who asked me for it”

2.2 Verbs

- **Verb:** a word that represents an action
- **Singular/plural:** singular forms of verbs often end with s e.g. “Joe hikes for the summit” “We hike for the summit”
- **Tenses:** verbs can be in past, present or future tense depending on the verb-form or the tense of a copular verb (to be or to have).
- **Verb-form as nouns:** a verb can be used as a noun by placing –ing e.g. “Singing is a lot of fun”

2.3 Adjectives and Adverbs

- **Adjectives:** single words that describe a noun, usually appears immediately before its noun e.g. “Sally ordered an *Italian* salad”
- **Adverbs:** words that describe a verb and almost always end in –ly e.g. “That is a very *cleverly* written essay”

2.4 Conjunctions

- **Conjunctions:** words that link ideas together e.g. and, either, or, neither, nor and because
- When two or more ideas are linked together, they must appear in the same form e.g. “Samantha likes singing, dancing, and to act” is incorrect because “to act” is not in the –ing form; “Samantha likes singing, dancing and acting”

2.5 Clauses and Phrases

- **Phrase:** group of words that serves a particular function in a sentence
- **Clause:** group of words that includes a subject noun phrase, a verb phrase and an object noun phrase
 - **Independent:** doesn’t begin with a conjunction
 - **Dependent:** begins with a conjunction e.g. because...

- *Two independent clauses cannot be separated from each other by a comma*
 - E.g. "I have not yet begun to fight, time is on my side." Is incorrect because two independent clauses are placed together with a comma; it should be "I have not yet begun to fight; time is on my side."

2.6 Conditionals

- **Conditionals:** statements that use the conjunction "if"
- Good conditional sentences should not have the word "would" in the clause beginning with "if"
- E.g. "I would have stopped by your house if I would have known you were home" is incorrect; "I would have stopped by your house if I had known you were home"

2.7 Dangling Participles

- A participle is a special verb-form that can end in *-ing*, *-en* or *-ed*.
- Often used in the beginning of a sentence
- When participles are used, they are always understood to refer to the first noun phrase in the independent clause in a sentence
- Participial phrases can be incorrectly used if
 - an incorrect noun phrase is next after a participle phrase e.g. Screaming for help, the dog chased the mailman.
 - there is a logical error e.g. Encouraged by her previous successes, Martha decided to try again.

2.8 Correct & Incorrect Grammatical Uses

Incorrect Uses	Correct Uses
-ing words	
Don't correctly modify nouns or don't belong in a sentence	Correctly modifies the first noun phrase after the comma in the sentence
-ed words	
Don't correctly modify noun they refer to	Correctly modifies the first noun phrase after the comma in the sentence
Pronouns	
Use of pronoun when not needed or don't refer to a particular noun	Pronoun agrees with main nouns. Pronoun clearly indicates which nouns they're replacing.
Non-parallelism	
Use of conjunctions when ideas joined by conjunction are not in the same form	Words and phrases joined by conjunctions use parallel structures

Incorrect Uses	Correct Uses
Incorrect verb-forms	
Conjugating verbs incorrectly	All verb use must be consistent
Non-agreement	
A pronoun doesn't agree with its noun or a verb doesn't agree with its noun or pronoun	All pronouns and nouns, and verb and noun agree with each other
Adjectives versus adverbs	
Using an adjective to describe anything besides a noun is an error	Vice versa
as in general	
as is likely to appear in poorly written sentences	When it is used to compare two or more things,
Verb tense	
Verbs in multiple tense	All verb phrases are in the same tense
Commas separating complete clauses	
Separates two clauses <u>without</u> a comma AND a conjunction	Either separate complete clauses with a semicolon or dash, or a conjunction with a comma
Removing to be when possible	
Sentence includes <i>to be</i> when not needed	Use the verb to be to either equate two ideas or as a helping verb for other verbs
Removing the when possible	
Sometimes use <i>a, an</i> and <i>the</i> when unnecessary	Use articles to modify noun phrases only when needed
Parallelism with than	
Use comparisons with <i>than</i> when two things don't have parallel structures	Use comparisons with <i>than</i> when structure of two things compared are parallel
either/or versus either/and	
Incorrect sentence use <i>and</i> with <i>either</i>	Use the word <i>either</i> with the conjunction <i>or</i>
Proper pronoun usage (he/him)	
Use subject pronouns where object pronouns should appear	Use object pronouns as objects of verbs and prepositions
Conjunctions at beginning of sentence	
Begin with conjunctions even though there are no independent clauses	Only begin with conjunctions when they include independent clauses
if and would have	
Use <i>would have</i> instead of <i>had</i> immediately after <i>if</i>	Use <i>had</i> in <i>if</i> phrases, not <i>would have</i>

Incorrect Uses	Correct Uses
Removing <i>which</i> when possible	
Use <i>which</i> when they don't need to	Avoid <i>which</i> whenever possible
Relative pronouns – personal with people	
Use impersonal pronouns to take place of personal nouns	Use personal pronouns to replace personal nouns
Comparatives	
Use both <i>more</i> and <i>-er</i> to form comparatives	Use either <i>more</i> or the suffix <i>-er</i> –not both- to form comparatives
Redundancy	
Might express the same idea twice	Avoid redundancy by expressing each idea only once
Avoiding conjunctions	
Might use conjunctions where they aren't necessary	Use conjunctions when necessary, and use them to link ideas appropriately

3. IMPROVING SENTENCES

3.1 Improving Sentences Rules

- **Style:** choose the option which has a similar style of writing as the rest of the answer
- **Error:** correct answer choice must fix underlined mistake and also must not have any mistakes
- **Tip:** often, the correct option is the shortest one because the best way to fix errors that appear is usually to cut things out. When the correct option is not the shortest then it is the longest one because another way to fix errors that appear is to add words and phrases

3.2 Improving Sentences Process

- Read the entire prompt sentence
- Identify the grammatical error present in the sentence
- Focus on underlined portion of sentence and how the grammatical error identified affect this portion as this is the only part able to be altered
- When checking options, start with the shortest option, then longest and then the rest (explained in tip)
- Weigh benefits of each choice and which option reduces or removes all grammatical error
- Consider that there is nothing wrong with the sentence and therefore you can select option A

4. IDENTIFYING SENTENCE ERRORS

- Each question presents a single sentence where several words and phrases will be underlined
- Task is to find part of sentence that contains an error

4.1 Rules for Identifying Errors

- Think ONLY about grammar; no need to consider style
- The need to delete a selection isn't one of the "errors" allowed to be identified therefore do not mark an answer choice that you think should be deleted entirely
- **Tip:** for sentences containing prepositional phrases, often the verb is made to agree with the noun in the prepositional phrase however this is incorrect and the verb must agree with its subject.

4.2 Identifying Sentences Process

- Read the entire prompt sentence
- Focus on the underlined portions of the sentence
- Draw lines from words in underlined section to the words in the sentence it is related to e.g. pronouns to proper nouns and to verbs etc.
- Follow lines and find which underlined word doesn't fit with the word it is related to
- Consider all other underlined words
- Consider underlined portions of text on their own and check as they may be incorrect by itself
- Consider that there is nothing wrong with the sentence and therefore you can select option E
- Re-read sentence and mark your answer

5. IMPROVING PARAGRAPHS

- For these questions, you will be given a short, poorly-written composition where every sentence is numbered
- Questions asked on how to improve composition:
 - Changes made to individual sentences
 - Ways to combine two sentences into one
 - Additions that could be made to individual paragraphs

5.1 Simple Paragraphs

- According to SAT, the best sentences are ones that discuss the fewest number of topics
- When asked to remove a sentence, delete sentence that introduces a new topic not mentioned elsewhere
- When asked to add a sentence, add sentence that introduces fewest new concepts to the paragraph

5.2 Improving Paragraphs Process

- Identify type of question you're dealing with; many are a combination of Improving Sentences and Passage-based reading questions.
- Use Improving Sentences approach with a few changes; any portion of the sentence may be changed or entire sentence could be replaced with a similar one.
- Use Passage-based Reading approach for questions that ask about author's goal/strategy or relationships between parts of composition.

CRITICAL READING SECTION

1. SENTENCE COMPLETION

1.1 Tips

- Use key words to understand relationship within sentence e.g. when sentences contain words such as unlike, although while etc., the next word should be against the initial idea.
- Not every rational response works with sentence; use fact or idea within sentence to choose a word which restates that original fact.
- Make sure both blanks in a double-blank sentence are perfect; just one making sense doesn't work

1.2 Patterns

- **Opposites:** one of the options is the exact opposite of the correct answer
- **Similarities:** one of the options is a word similar to the correct word but wouldn't make sense when placed in sentence e.g. optimistic and optimal
- **Same subject, wrong answer:** one of the options is a word that is in context with the idea in a sentence however doesn't make sense when placed within it.

1.3 Happy/Sad Test

- By saying the word and thinking of the first emotion that comes to mind, classify it whether it is a "happy" word or a "sad" one
- Using key words, check whether blank space requires a positive or negative word.
- Test the correct group words in the blank and choose one that fits in best.

2. PASSAGE-BASED READING

2.1 Types of Questions

- **Word use questions:**
 - "In line x , the word "abc" most nearly means..."
 - To answer question, substitute each word option in – only one choice will make any sense.
- **Citation questions:**
 - "The author probably mentions [a particular concept] in line x in order to..."
 - To answer question, choose option which RESTATES most of the citation; no more, no less!
- **General passage questions:**
 - "The author of the passage would be most likely to support which of the following statements?"
 - Consider all citations in the other questions and choose most suitable option

2.2 Types of Wrong Answers

- **Type 1:** extra information; something extra not given in the passage
- **Type 2:** direct contradiction; an answer completely contradicts the citation given
- **Type 3:** complete irrelevance; most tempting, answer has nothing to do with passage given
- **Type 4:** confused concepts; careful on details, correct answer but one small feature switched or altered

2.3 Other Tips

- There is no need to read the whole passage even for complete passage questions; do all citation questions first and then go back to do general passage questions
- Word use questions, most likely that one option is a common meaning of quoted word however this is ALMOST ALWAYS incorrect. Go back and read in context
- Right answer often DIRECT restatements of words and phrases in citation and address question completely

2.4 Reading Process

- Read the key parts of the passage well:
 - Italicized introduction of passage
 - Opening sentence of passage
 - Closing sentence of passage
- Skim through rest of passage quickly and superficially
- Identify type of question and follow method to answer that questions

- Be critical to detail and find the four wrong answers first. There is always only one correct answer; any small extra detail can falsify a statement!

2.5 Keywords in Questions

Word	Explanation
“according to the author/passage”	Answer in terms of statements, assumptions or inferences of what writer has said
“best”	Most suitable or acceptable even if more than one good answer
“chiefly”, “mainly”, “primarily”	Most central element or most important explanation or idea within passage.
“implies”, “infer”, “suggests”	Come to conclusion suggested by information in passage but not directly stated

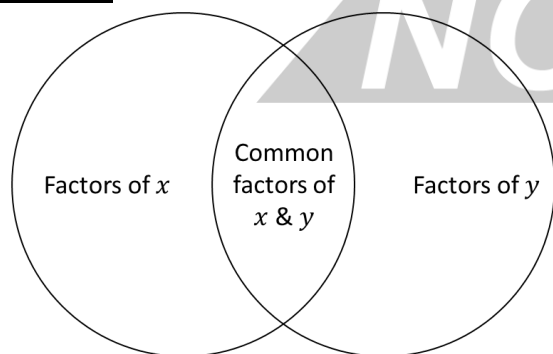
2.6 Facts, Assumptions and Inferences

- **Facts:** statements known to be true and that can be shown to be true through passage
- **Assumption:** propositions that writers make to reach conclusion
- **Inferences:** conclusions you reach based on what has been said in the passage.

MATHEMATICS SECTION

1. NUMBER AND OPERATIONS

1.1 Factors



- HCF = product of common factors of x and y
- LCM = product of all items in Venn diagram
- Factors, multiples and remainders
- Prime numbers

1.2 Sets

- Sets are a collection of things

- Things in a set are called “members” or “elements”
- Union: combine all elements of the sets
- Intersection: elements in common between two or more sets

2. ALGEBRA AND FUNCTIONS

2.1 Factoring

- **Difference of two squares:**

$$(a^2 - b^2) = (a - b)(a + b)$$

- **Trinomial factorization:**

$$2x^2 + 11x + 12$$

$$2x^2 + ax + bx + 12$$

$$a = 8 \text{ and } b = 3$$

$$2x^2 + 8x + 3x + 12$$

$$2x(x + 4) + 3(x + 4)$$

$$(2x + 3)(x + 4)$$

Where:

$$ab = 2 \times 12 = 24$$

$$a + b = 11$$

2.2 Direct and Inverse Variation

- Direct variation: $y = kx$
- Inverse variation: $y = \frac{k}{x}$

2.3 Functions

- Domain: x -values
- Range: y -values
- **Transformations:**
 - $y = f(x) + a$ translates $f(x)$ 'a' units in y direction
 - $y = f(x + a)$ translates $f(x)$ '-a' units in x direction
 - $y = -f(x)$ is a reflection of $y = f(x)$ in the x -axis
 - $y = f(-x)$ is a reflection of $y = f(x)$ in the y -axis

3. GEOMETRY AND MEASUREMENT

3.1 Geometric Notation

- \overline{PE} the line containing the points P and E
- \overline{PE} the line segment with endpoints P and E
- PE the length of line segment \overline{PE}
- \overrightarrow{PE} starting at P and extending infinitely in direction E
- $\angle DOC$ angle formed by \overline{OD} and \overline{OC}
- $m\angle DOC$ measure of $\angle DOC$
- $\triangle OQC$ triangle with vertices O, C and Q
- $BPMO$ quadrilateral with vertices B, P, M and O
- $\overline{BP} \perp \overline{PM}$ \overline{BP} and \overline{PM} are perpendicular

3.2 Triangles

- **Congruent triangles:** triangles that have the same size and shape
- **Similar triangles:** same angle, sides in ratio
- **The triangle inequality:** the sum of the lengths of any two sides of the triangle is greater than the length of the third side

3.7 Polygons

- Sum of Interior Angles = $180(n - 2)$
- Sum of Exterior Angles = 360

3.8 Coordinate Geometry

- Distance = $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
- Midpoint: $\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$

4. DATA ANALYSIS, STATISTICS & PROBABILITY**4.1 Statistics**

- Mean: sum of data divided by number of values
- Mode: most common or most popular data value
- Median: Middle value when data ordered
 - If n odd, median = $\frac{1}{2}(n + 1)^{th}$ value
 - If n even, median = $\frac{1}{2}n^{th}$ value
- Arithmetic mean, median, mode
- Weighted average
- Average of algebraic expressions

NOTES

COLLEGEBOARD SAT I



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