<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSAT TEST RESOURCES</td>
<td>4</td>
</tr>
<tr>
<td>PSAT OVERVIEW</td>
<td>5</td>
</tr>
<tr>
<td>TESTING AND ANALYSIS</td>
<td>7</td>
</tr>
<tr>
<td>INTRODUCTION TO THE PSAT</td>
<td>9</td>
</tr>
<tr>
<td>THE PSAT SCORING SCALE</td>
<td>10</td>
</tr>
<tr>
<td>MATHEMATICS TEST</td>
<td>12</td>
</tr>
<tr>
<td>Mathematical Reasoning</td>
<td>13</td>
</tr>
<tr>
<td>Standard Multiple-Choice</td>
<td>13</td>
</tr>
<tr>
<td>Hand-calculated responses (with Grid-ins)</td>
<td>14</td>
</tr>
<tr>
<td>Question Types</td>
<td>17</td>
</tr>
<tr>
<td>Arithmetic</td>
<td>17</td>
</tr>
<tr>
<td>Divisibility</td>
<td>18</td>
</tr>
<tr>
<td>Multiplication</td>
<td>20</td>
</tr>
<tr>
<td>Addition</td>
<td>20</td>
</tr>
<tr>
<td>Subtraction</td>
<td>21</td>
</tr>
<tr>
<td>Evens and Odds</td>
<td>22</td>
</tr>
<tr>
<td>Prime Numbers</td>
<td>24</td>
</tr>
<tr>
<td>Percents</td>
<td>26</td>
</tr>
<tr>
<td>Square of a Number</td>
<td>29</td>
</tr>
<tr>
<td>Exponents</td>
<td>31</td>
</tr>
<tr>
<td>Roots</td>
<td>33</td>
</tr>
<tr>
<td>Averages</td>
<td>34</td>
</tr>
<tr>
<td>CRITICAL READING TEST</td>
<td>36</td>
</tr>
<tr>
<td>Flying over the Passage</td>
<td>36</td>
</tr>
<tr>
<td>Creating a Tentative Summary</td>
<td>36</td>
</tr>
<tr>
<td>Openings and Endings</td>
<td>37</td>
</tr>
<tr>
<td>Extraneous Information</td>
<td>38</td>
</tr>
<tr>
<td>Using Kitchen Logic</td>
<td>38</td>
</tr>
<tr>
<td>Getting into the Author’s Mind</td>
<td>39</td>
</tr>
</tbody>
</table>
**PSAT Test Resources**

**Free PSAT Practice Tests**
http://www.testprepreview.com/psat_practice.htm

**Financial Aid Facts**
http://www.finaidfacts.org

**Scholarship Help**
http://www.scholarshiphelp.org

**Study Tips and Information**
http://www.studyguidezone.com/resource_tips.htm
**PSAT Overview**

The PSAT/SAT is indeed a difficult examination, and as such, it was required that media be chosen by which intellectual ability could be measured. In the case of the PSAT/SAT, math, reading, and writing were the selected media. While there is an ongoing, low-profile controversy about whether or not this test truly measures your abilities with regards to what you’ll need for college school, that is not the purpose of this book. The purpose is, however, to make sure that you’re able to achieve the best possible state of preparation, allowing you to maximize your score potential - no matter if your actual aptitude has been measured.

As no test can measure all aspects of a person’s intelligence, the PSAT/SAT measures those skills deemed most critical to a new college student. Then again, if any admission test, no matter how cleverly assembles, is inherently inadequate, why perform this type of testing at all? This is a question posed by every student who sees the PSAT/SAT looming ahead of him/her. Nevertheless, the answer to this question is quite simple, and quite reasonable; to make school acceptance a more fair experience, by expanding the basis approval beyond your grades.

Your PSAT/SAT score is one of the most critical elements to your qualification for graduate school, so it is naturally much too important for you to take this test unprepared. The higher your PSAT/SAT score, the better your chances of admission will be for a respected, competitive program.
While different programs assign a different weight or importance to your PSAT/SAT scores, it is safe to assume that your PSAT/SAT will be a major determining factor when it comes to the final admission decision made by each school to which you’ve applied.

Careful preparation, as described in this expert guide, along with hard work, will dramatically enhance your probability of success. In fact, it is wise to apply this philosophy not only to your school applications, but to other elements of your life as well, to raise you above the competition. Your PSAT/SAT score is one of the areas in the admission process over which you have a substantial amount of control; this opportunity should not be taken lightly. Hence, a rational, prepared approach to your PSAT/SAT test as well as the rest of the admission process will contribute considerably to the likelihood of acceptance.

Keep in mind, that although it is possible to take a PSAT/SAT test more than once, you should never take the test as an “experiment” just to see how well you do. It is of extreme importance that you always be prepared to do your best when taking the PSAT/SAT.
Testing and Analysis

It won’t take you long to discover that the PSAT/SAT is unlike any test you’ve taken before, and it is probably unlike any test you will ever take again in your academic career. The typical high school or college test is a knowledge-based test. The PSAT/SAT, however, is skills-based.

What does this mean to you? It means that you’ll have to prepare yourself in a completely different way! You won’t simply be reciting memorized facts as they were phrased in some textbook.

The PSAT/SAT requires you to think in a thorough, quick and strategic manner…and still be accurate, logical and wise.

This test is designed to judge your writing, verbal and mathematical ability in the ways that schools feel is vital to the success of first year students.

To some extent, you have already gradually obtained these abilities over the length of your academic career. However, what you probably have not yet become familiar with is the capability to use these abilities for the purpose of maximizing performance within the complex and profound environment of a standardized, skills-based examination.

There are different strategies, mindsets and perspectives that you will be required to apply throughout the PSAT/SAT. You’ll need to be prepared to use your whole brain as far as thinking and assessment is concerned, and you’ll need to do this in a timely manner. This is not
something you can learn from taking a course or reading a book, but it is something you can develop through practice and concentration.

This guide provides you with the professional instruction you require for understanding the traditional PSAT/SAT test. Covered are all aspects of the test and preparation procedures that you will require throughout the process. Upon completion of this guide, you’ll have the confidence and knowledge you need for maximizing your performance on your PSAT/SAT.
Introduction to the PSAT

The purpose of the PSAT/SAT is to establish a standard method of measurement for the skills that have been acquired by school applicants. These skills are considered critical to schools for a first-year student to be able to succeed.

Fortunately, the PSAT/SAT does not change very dramatically from year to year. What this means to you, is that it has become possible for quality practice tests to be produced, and if you should take enough of these tests, in addition to learning the correct strategies, you will be able to prepare for the test in an effective manner.
PSAT/SAT scoring is not hard to comprehend when it is properly explained.

There is no “passing” score to the PSAT/SAT, but you will need to know what the cut off average score is for the schools to which you’re looking to apply. For this information, check their website, or call, and they’ll tell you the average score of students who are accepted.

Each school has a different policy for weighing PSAT/SAT scores with your GPA. The majority of schools will weigh your PSAT/SAT score more heavily than your GPA. In fact, some schools will weigh your PSAT/SAT at 70% and your GPA at 30%, which means that this one examination is worth more than your 4 years of undergraduate work.

It’s up to you to look into the schools to which you’ll be applying, so that you’ll have this information, and know the exact value of your PSAT/SAT. Many schools will make their calculation structure for the combination of PSAT/SAT and GPA available to the public.

Knowing this information before you enter the PSAT/SAT examination means that you know exactly what you’re facing that day. You will have a realistic perception of the worth of the test, and you will have the proper motivation to fully apply yourself to reach your maximum potential.
You’ll also be able to realistically judge the type of school to which you should be applying, and you can better set out your future plans in your mind.
Mathematics Test

To identify the skills that need extra work, complete a practice PSAT test that gives additional information, and have a look at the skill report that is produced by your sample PSAT. Or, complete a practice test and look for yourself at the areas where you excelled, and the areas where struggle was apparent.

Your “critical” math skills will be in the areas where you have made the most wrong answers on your practice PSAT. Those will be the math skills that will best help your score in the shortest period of time, if you manage to practice and better these skills. This is the area in which you can maximize your score increase potential.

To master your critical math skills, there are certain steps you may take:

• Read over the skill lesson in this book, very carefully
• Find some practice PSAT tests and work specifically on the questions that test your critical math skills, practicing the new skills that you have learned in through your review.
• Use textbooks for increased detail, assistance, and question examples for the areas in which you are struggling the most.
• Practice, practice, practice!

The best way to get to learn your math skills is to rehearse them with as many new sample questions as you can get your hands on. The questions you do, the more you will become familiar and comfortable
with that type of question, so that you can move on and concentrate on other areas for perfection.

**Mathematical Reasoning**

There are two different mathematics sections in the PSAT, each containing a different kind of question. These are:

- Standard Multiple-Choice
- Hand-calculated responses (with Grid-ins)

Within each section, the questions become increasingly difficult as you proceed. Therefore, the first few questions will always be much easier to solve than the last few questions will be.

To give you an idea as to the types of questions presented, please consider the following examples:

**Standard Multiple-Choice**

Standard multiple-choice questions are made up of either word problems, algebraic manipulations, or geometry. Here is a sample of a word problem:

*If one-sixth of all female students at Princeton like chips, and one-third of Princeton’s male students have nachos. Therefore, what fraction of the entire student population likes chips?*

A. 1/9
B. 1/3
C. 5/18
D. 10/18
E. It cannot be determined from the given information
   (Note: the answer would be E)

Hand-calculated responses (with Grid-ins)

These questions are similar to the Standard Multiple Choice Questions. The difference is that you acquire the answer and enter it directly on the grid. These problems are not difficult to solve, and as you become familiar with them, they do become easier. Basically all you need to know is how to enter your answers onto the grid.
So here are the rules. Each column represents a digit from your answer, and each column has a specific purpose (as outlined in the figure above).

Also, as both decimals and fractions are acceptable, you don’t have to worry about the format of your answer. For example, the scoring machine will accept both 0.5 and ½, so feel free to enter whichever format is most comfortable to you.

However, the grid machine doesn’t understand mixed numbers, so if your answer is 2 ½ then you’ll either have to mark it as 5/2 or 2.5.

As the grid does not accept negative answers, you know that none of the answers will be negatives.

So should your answers be:

1) 5/16 and  2) 5.6

You will properly mark them in in the following way:
### Answer Key

#### 1.

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th></th>
<th>1</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>●</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td></td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td>②</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td>③</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td>④</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td>⑤</td>
<td>●</td>
<td>⑥</td>
<td>⑦</td>
<td>⑧</td>
</tr>
<tr>
<td>⑥</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td>⑦</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td>⑧</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
<tr>
<td>⑨</td>
<td>①</td>
<td>②</td>
<td>③</td>
<td>④</td>
</tr>
</tbody>
</table>

#### 2.

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th></th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>●</td>
<td>②</td>
<td>③</td>
</tr>
<tr>
<td>②</td>
<td>①</td>
<td>②</td>
<td>③</td>
</tr>
<tr>
<td>③</td>
<td>①</td>
<td>②</td>
<td>③</td>
</tr>
<tr>
<td>④</td>
<td>①</td>
<td>②</td>
<td>③</td>
</tr>
<tr>
<td>⑤</td>
<td>●</td>
<td>⑥</td>
<td>⑦</td>
</tr>
<tr>
<td>⑥</td>
<td>①</td>
<td>②</td>
<td>③</td>
</tr>
<tr>
<td>⑦</td>
<td>①</td>
<td>②</td>
<td>③</td>
</tr>
<tr>
<td>⑧</td>
<td>①</td>
<td>②</td>
<td>③</td>
</tr>
<tr>
<td>⑨</td>
<td>①</td>
<td>②</td>
<td>③</td>
</tr>
</tbody>
</table>
Question Types

The test is very consistent with the type of mathematics questions that it uses, year after year. The following are the types of mathematical questions that you are likely to encounter:

- Arithmetic
- Divisibility
- Multiplication
- Addition
- Subtraction
- Evens and Odds
- Prime Numbers
- Percents
- Square of a Number
- Exponents
- Roots
- Averages

Arithmetic

Arithmetic skills refer to the questions that can be solved by using addition, subtraction, multiplication and/or division.

Since calculators are permitted in the test, the questions will obviously not be purely arithmetic - they’re not out to measure your ability with a calculator. So in this style of question, you’ll need to recall your order of operations. A good trick to recall your order of operations is
“Please Excuse My Dear Aunt Sally”...before you say “huh?” recognize the first letters in this phrase:

- Work within Parenthesis
- Simplify Exponents
- Multiplication and Division
- Addition and Subtraction

The majority of arithmetic questions will require you to take multiple steps, and will likely test other skills as well, instead of being purely arithmetic. Often, the questions will be presented in the form of word problems, where you will need to decide when to add, subtract, multiply and divide.

For example:

*How many egg cartons are needed to hold 300 eggs, if each carton can hold one dozen (1 dozen = 12)*

A. 15  
B. 18  
C. 22  
D. 25  
E. 28

Note: the answer is 25

**Divisibility**
The factors of integer X are the integers by which X can be divided without leaving a remainder. Thus, X is divisible by its factors.

For example:

The number 10 is divisible by both 5 and 2. 10 can be divided by both of these integers without leaving a remainder.

To review the rules of divisibility, have a look at the following:

1. Numbers divisible by 2 end in even numbers.

2. Numbers divisible by 3 can be determined by adding the sum of their digits and checking if that number is divisible by 3 (for example the number 123: 1+2+3=6, 6 is divisible by 3 with no remainder).

3. Numbers divisible by 4 can be identified if their last two digits will divide by 4 without a remainder (for example, the number 624: the last two digits are 24, which are divisible by 4 with no remainder).

4. Numbers divisible by 5 end only in 5 or 0.

5. Numbers divisible by 9 occur when the sum of its their digits are divisible by 9 (for example, the number 639: 6+3+9 = 18, which is divisible by 9).

6. A number is only divisible by 10 if it ends in 0

The following is an example of a divisibility question:

Which of the following integers divides into both 200 and 150?
A. 3  
B. 7  
C. 30  
D. 50  
E. 300

Note: The correct answer is (D)

**Multiplication**

The following are a few simple rules to keep your multiplications on track:

- Positive x Positive = Positive
- Negative x Negative = Positive
- Negative x Positive = Negative

**Addition**

Here are some rules to be certain that there are no slips while doing addition:

- Positive + Positive = Positive
- Negative + Negative = Negative
- Negative + Positive = either positive or negative (you must use the absolute value of both: subtract the smaller from the larger and keep the sign of whichever absolute value was larger)
**Subtraction**

The definition of subtraction is:  \( A - B = A + (-B) \)

A minus B is the same as A plus (the opposite of B)

\( X > 0 \), means that \( X \) is a positive number
\( X < 0 \), means that \( X \) is a negative number

\(- (A - B) = -A + B = B - A\)

\((-X)^2 = X^2\)

If \( X - 0 \), \( X^2 > 0 \)

If, on the number line, one number occurs to the left of another number, the number on the left is the smallest number.

Therefore, when studying the line above, you will know that \( X < Y \) and \( Y < Z \).

For example:

Use the number line to make conclusions with regards to whether each number is positive or negative.
In this situation, you will have an easier time if you implement specific numbers to fit the problem. For example, let \( X = -7 \), \( Y = -2 \), and \( Z = 3 \). Be certain to utilize some negative numbers while substituting.

The following is an example of a subtraction question:

\[ Y - X \]

Solution: Positive \( Y \) is greater than \( X \).
\[-2 - (-7) = -2 + 7 = 5\]

**Evens and Odds**

An even number is any word that is divisible by 2: numbers that are within the set \{…-6, -4, -2, 0, 2, 4, 6,…\}. Remember, though, that an even number is divisible by 2 and not have any remainder. Keep in mind also that 0 is an even number. Consecutive even numbers are all located 2 units apart. For example, if \( x \) is an even number, then the next consecutive even number would be represented as \( x + 2 \).

Odd numbers, on the other hand, are numbers within the set \{…-5, -3, -1, 1, 3, 5,…\}.
The following charts demonstrate the properties of odd and even numbers. To check the property of a number, you can simply substitute the appropriate numbers.

Properties of odd and even numbers with Addition

<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even + Even = Even</td>
<td>$2 + 8 = 10$</td>
</tr>
<tr>
<td>Odd + Odd = Even</td>
<td>$3 + 9 = 12$</td>
</tr>
<tr>
<td>Odd + Even = Odd</td>
<td>$3 + 8 = 11$</td>
</tr>
</tbody>
</table>

Properties of odd and even numbers with Addition

<table>
<thead>
<tr>
<th>Property</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even x Even = Even</td>
<td>$4 \times 6 = 24$</td>
</tr>
<tr>
<td>Even x Odd = Even</td>
<td>$4 \times 5 = 20$</td>
</tr>
<tr>
<td>Odd x Odd = Odd</td>
<td>$3 \times 9 = 27$</td>
</tr>
</tbody>
</table>

Consider the following example:

If $R$ is an odd integer, what are the next two consecutive odd integers?

A) T and V
B) R and R+1
C) R+1 and R+2
D) R+2 and R+4
E) R+1 and R+3

Note: the correct answer is (D)
Here’s another example:

*If x is an odd integer and y is an even integer, tell whether each expression is odd or even.*

A. $x^2$
B. $xy$
C. $y^2$
D. $x + y$
E. $2x + y$

Note (A) is odd. (B) is even. (C) is even. (D) is odd, and (E) is even.

### Prime Numbers

A prime number is defined as an integer that is greater than 1, and has only two positive factors, 1 and itself.

For example, 7 is a prime number, as its only factors are 1 and 7. However, 6 is not a prime number, because its factors are 1, 2, 3, 6.

The first ten prime numbers are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29

Note, though that 1 is not a prime number, and both the smallest and the only even prime number is 2.

Prime factorization is the process by which you express a number as a result of only prime numbers.
For example:

To create the prime factorization of 24, you’d represent it as:
\[ 2 \times 2 \times 2 \times 3 \] or \[ 2^3 \times 3 \]

To create the prime factorization of 15, you’d represent it as:
\[ 5 \times 3 \]

An example of a factor question is:

*If* \( xy = 13 \) *and both* \( x \) *and* \( y \) *are positive integers, then what is the sum of* \( x + y \)?

A. 13  
B. 14  
C. 16  
D. 20  
E. 26

Note: the answer is B

Here is another example:

*What is the sum of the first 5 prime numbers?*

A. 18  
B. 28  
C. 30  
D. 34
E. 38

Note: The first five prime numbers are 2, 3, 5, 7, 11 and their sum is 28. The answer is B.

**Percents**

The word percent means “hundredths” or a number which is divided by 100. Converting a number into a percentage involves multiplying the number by 100.

A percent can be determined by performing the division of the part by the total and multiplying it by 100:

\[
\text{Percent} = \frac{\text{Part}}{\text{Total}} \times 100
\]

For example, if Wendy missed 12 out of 80 examination questions, what is the percent of questions she missed?

\[
\text{Percent} = \frac{\text{missed questions}}{\text{Total}} \times 100 = \frac{12}{80} \times 100 = 0.15 \times 100 = 15\%
\]

The phrase “X is N percent of Y” can also be written mathematically as:

\[
X = \frac{N}{100} \times Y
\]
The word “is” means equal (=), while the word “of” means “multiply.” However, before multiplying, you must change a percent into a decimal or fractional format.

For example:

5 is 20% of 25, means 5 = 0.20 x 25

To change the fraction into the percent, you must first change the fraction into a decimal, and then multiply by 100 (or move the decimal point by 2 places to the right)

For example:

Change the fraction 1/5 into a percent.

First, change the fraction 1/5 into the decimal 0.2, and multiply by 100 (move the decimal 2 places to the right). Therefore:

1/5 x 100 = 20%

The following table provides the common percentages that you will use on a regular basis, and may wish to memorize.

<table>
<thead>
<tr>
<th>Fraction</th>
<th>Decimal</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/100</td>
<td>0.01</td>
<td>1%</td>
</tr>
<tr>
<td>1/10</td>
<td>0.1</td>
<td>10%</td>
</tr>
<tr>
<td>1/7</td>
<td>0.1428571</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

Copyright © StudyGuideZone.com. All rights reserved.
<table>
<thead>
<tr>
<th>Fraction</th>
<th>Decimal</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/6</td>
<td>0.16666...</td>
<td>16.6% or 16.7%</td>
</tr>
<tr>
<td>1/5</td>
<td>0.2</td>
<td>20%</td>
</tr>
<tr>
<td>1/4</td>
<td>0.25</td>
<td>25%</td>
</tr>
<tr>
<td>1/3</td>
<td>0.33</td>
<td>33.3%</td>
</tr>
<tr>
<td>1/2</td>
<td>0.5</td>
<td>50%</td>
</tr>
<tr>
<td>3/5</td>
<td>0.6</td>
<td>60%</td>
</tr>
<tr>
<td>1</td>
<td>1.0</td>
<td>100%</td>
</tr>
<tr>
<td>3/2</td>
<td>1.5</td>
<td>150%</td>
</tr>
</tbody>
</table>

Please note that numbers over 1 achieve percentages that are greater than 100%.

Consider the following example:

*What is 20% of 50?*

A. 5  
B. 8  
C. 10  
D. 12  
E. 15

Note: the answer is C

To solve this question, you must rewrite it as an algebraic question. Therefore, let x represent the unknown number.
\[ X = 0.20 \times 50 \]

Keep in mind that to change the percent to a decimal, and that the word “of” means that you should multiply.

\[ X = 10 \]

Here is another example:

5 is what percent of 2?

A. 2.5%
B. 25%
C. 100%
D. 250%
E. 500%

Rewrite this as an algebraic equation. \[ 5 = n \times 2 \]
Solve for \( n \) and remember to change the answer to a percent.
\[ n = \frac{5}{2} = 2.5 = 250\% \]

Therefore, the answer is (D)

**Square of a Number**

Squaring a number means to multiply that number by itself.

The notation for squaring a number (\( x \)) is as follows: \( x^2 \)
When squaring an integer, the result obtained is called a perfect square.

When preparing for the test, make sure that you are fully capable of understanding and reproducing the following table, as well as recognizing the numbers that are perfect squares and perfect cubes.

<table>
<thead>
<tr>
<th>n</th>
<th>n^2</th>
<th>n^3(n &gt; 0)</th>
<th>n^3(n &lt; 0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-1</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>8</td>
<td>-8</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>27</td>
<td>-27</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>64</td>
<td>-64</td>
</tr>
<tr>
<td>5</td>
<td>25</td>
<td>125</td>
<td>-125</td>
</tr>
<tr>
<td>6</td>
<td>36</td>
<td>216</td>
<td>-216</td>
</tr>
<tr>
<td>7</td>
<td>49</td>
<td>You will not need to know any higher</td>
<td>You will not need to know any higher</td>
</tr>
<tr>
<td>8</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>144</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Squared numbers and special properties

- $x^2 > 0$ always, except for $x = 0$
- $x^2 > x$ for $x > 1$

Copyright © StudyGuideZone.com. All rights reserved.
• \( x^2 < x \) for \( 0 < x < 1 \)
  *important
• \( x^2 = x \) for \( x = 1 \) or \( 0 \)
• The square root of \( x^2 \) equals the absolute value of \( x \).
  \[
  \sqrt{x^2} = |x|
  \]
• If \( x^2 = y^2 \), then either \( x = y \), or \( y = -x \), or \( x = -y \).

The following is an example:

*Of the following numbers, which is a both a perfect square and a perfect cube?*

A. 4  
B. 8  
C. 9  
D. 16  
E. 64

Note: the answer is (E)

**Exponents**

The mathematical notations for numbers which are the result of a number that is multiplied by itself a number of times is called exponents.

Examples:
\[ x^3 = x \times x \times x \]
\[ x^5 = x \times x \times x \times x \times x \]

The expression of \( x^n \) is also called the \( n^{th} \) power of \( x \). The \( x \) is the base, while the \( n \) is the exponent. Math questions will usually only utilize integral exponents. \( x^2 \) is read as \( x \)-squared, and \( x^3 \) is read as \( x \)-cubed. All others are read as a power of \( x \). \( x^4 \) is read as the 4th power of \( x \).

When it comes to the power of 10, there is a simple, quick rule that simplifies the powers of 10, by writing it as 1, followed by the number of zeros as specified by the power.

Examples: \( 10^5 = 1 \) followed by 5 zeros. \( 100000 = 100,000 \).

An example you may find is:

*Represent 32,456 to the power of 10.*

The solution would be as follows:

\[ 32,456 = 3 \times 10^4 + 2 \times 10^3 + 4 \times 10^2 + 5 \times 10^1 + 6 \times 10^0 \]

Consider the following example:

Solve for \( x \): \((x - 3)^2 = 49\).
You could use algebra and take the square root of both sides or since 49 is a perfect square you could guess integers for x. Just remember x -3 must be positive or negative.

If you try guessing, the integers 10 and -4 work. To get an algebra solution, do the following:

\[(x - 3)^2 = 49\]
\[x - 3 = 7 \text{ or } x - 3 = -7\]
\[x = 10 \text{ or } x = -4\]

It is your goal to get problems correct quickly. Sometimes guessing (Guessing in this case means substituting in numbers to see which satisfy the equation.) is faster than solving an equation, if you train yourself to use the technique. Of course, if you cannot "see" the answers fast enough, use other approaches to answer the problem.

**Roots**

The test will require you to manipulate both square roots and cube roots. Some of the questions will measure whether or not you understand these expressions.

You should remember that none of the following should ever occur:

1. No perfect square can be left underneath a radical (square root) sign.
2. No radical can be within the denominator.
3. No fractions may occur within the radical sign.
Averages

There are three basic components that comprise an average problem:

1. Total
2. Average (also known as a mean)
3. # of numbers

The average is the total of elements that are within the set.

To discover the average, simply divide the total by the # of numbers.

For example:

Jenna’s last four test scores were 35, 56, 75, and 28. What is the average of Jenna’s test scores?

A. 43
B. 48.5
C. 52.5
D. 54
E. 47

Note: the answer is (B).

35 + 56 + 75 + 28 = 194
194 / 4 = 48.5

Five things to remember when solving averages:
1. If a number that is the same as the average is added, the new average will not change.

2. If a number is added and it is less than the average, the average will decrease.

3. If a number is added and it is greater than the average, the average will increase.

4. If a pair of numbers are added, and they are “balanced” on both sides of the average, the arithmetic mean is the middle value.

5. To discover the average between two evenly spaced numbers, add the first and the last terms and divide them by 2.
Critical Reading Test

Flying Over the Passage

A topic that is hotly debated among test taking circles is whether or not you should read the reading passages before you read the question. One theory is that you can save time if you read the questions first and then go back and read over the passage. Another theory is that you should read the passage first and then go into the questions. Both theories have their own individual merit and due to the differences in ability and preferences among test takers, one method may work better than another for you.

Our recommended theory is the flyover. You want to spend some time on the passage, at a bare minimum so that you have a general idea about what the questions are going to ask and get your mind into the proper mindset for the series of questions. However, you don’t want to waste too much time on reading the passage, because much of the detail will be forgotten by the time you get to the questions anyway. Therefore, you should fly over the passage. You should read it very quickly for a high-level overview (hence the flyover) understanding of what is contained in the passage.

In part, this is a compromise between the theories that gains most of the benefits of each. You won’t waste time on the details and yet will have a general idea of what the passage is about and what to expect.

Creating a Tentative Summary
After you’ve finished your flyover of the passage, take a few seconds and compose a tentative mental summary of what you’ve just read. Try to sort out the details you picked up on and arrange them into a loose organizational pattern that describes the passage. Remember that your goal in the flyover is not to check it off of a test-taking list of things to do. You want there to be some purpose behind the flyover and having the definite goal of being able to put together a brief mental summary will allow you to maintain some focus and gain benefit from the flyover – as opposed to just skimming it for the sake of skimming it without actually picking up on anything.

As you begin going through the questions and answer choices, if you get good enough at putting together your mental summaries from practice, you should be able to eliminate a number of answer choices that are immediately contrary to your summary. Note, however that if you find yourself without any good answer choices remaining (because you’ve eliminated them all) you obviously had to have eliminated the right answer choice. Don’t hesitate to reopen an answer choice that you’ve already “eliminated” from consideration and reconsider it as a possibility. If you think an answer choice contradicts your initial summary, you’re probably right, but are not infallible.

**Openings and Endings**

A main focus of this flyover will be the opening and ending sentences in each paragraph. These are likely to contain the main ideas of the paragraphs and should be mentally tagged for future reference. Try to remember a vague idea of what the different paragraphs are about, because this will save you time when answering questions later.
For the most part, make sure you never try to just answer the questions from this first flyover. Always try to go back and confirm the answer, as your memory will play tricks on you and the writers of the test questions may deliberately have planted a trap for you – remember that they don’t exactly have your best interests at heart.

**Extraneous Information**

Some answer choices will seem to fit in and answer the question being asked. They might even be factually correct. Everything seems to check out, so what could possibly be wrong?

Does the answer choice actually match the passage, or is it based on extraneous information not even contained in the passage. Just because an answer choice seems right, don’t assume that you overlooked information while reading the passage. Always try to go back and find the support for the answer choice in the passage. Your mind can easily play tricks on you and make you think that you read something or that you overlooked a phrase.

Unless you are behind on time, always go back to the passage and make sure that the answer choice “checks out.”

**Using Kitchen Logic**

When a question asks the test taker to identify a main idea, you should first focus on the opening and ending sentences of the passage
and each individual paragraph. If you can’t find the main idea from these key sentences, then ask yourself how you would describe the passage to someone who had never read it. Which words and phrases would you use to explain the principle ideas of the passage?

This is called ”Kitchen Logic” - when you explain something the way you would if you were talking to your friends and family, while sitting at your kitchen table. So, when faced with identifying the main idea of a difficult passage, make it easier on yourself by backing away from the passage and thinking about it in terms of using easy “kitchen logic”.

**Getting into the Author’s Mind**

A number of questions become much easier when you place yourself into the mind of the author of the passage. Ask yourself a few different questions:

“Why did the author write this passage?”
“What was the author trying to say?”
What angle is the author taking?”
“What is the single most important point the author is trying to make?”

Put yourself in the shoes of the author and imagine that you wrote the passage and try to identify what you were trying to describe and how you were trying to describe it. If you take on the opinions and ideas expressed by the author as your own, then it becomes easier to answer questions that would be easy for the author to answer.
Emotional Words

Each question will be about a different angle of the passage. For questions asking about the author’s emotions, find words in the passage that are adjectives describing emotions.

So, if a question asks what sort of attitude an author had towards the passage or subject, then look throughout the passage for attitude words that might convey a positive or negative attitude. Are words such as brilliant, excited, delightful used, or are words such as depressive, gloomy, disappointing used?

A lot of questions could be answered correctly simply by going through and circling all the adjectives in a passage. Without looking at anything else except for the adjectives in a passage, most questions about attitude or emotion could be answered correctly.

Another way of handling these situations is to arrange all of the answer choices in a list going from most negative to most positive.

Example:
Question: The author’s attitude on this topic is best described as:
   A. indignation
   B. eagerness
   C. impartiality
   D. fear
   E. consent
Now arrange these in order from negative to positive:
( - ) indignation, fear, impartiality, consent, eagerness (+)

This will help sort out the different choices and keep you from overlooking an answer choice and making an easy mistake.

**Finding the Key Words**

The strategy of finding certain “give-away” words does not only apply to adjectives in questions about emotions or attitude. Many questions about specific details will have key words that hold the “key” to finding the right part of the passage to look in for the answer.

Rather than answering based on your memory of the passage, you always want to have support for your answer choice rooted in a specific part of the passage. To gain that support, it follows that you have to identify which part of the passage to look in. While reading back over the entire passage may be the most foolproof method of finding that important part of the passage, it definitely is not the most time economical method of finding that part of the passage.

A better route is to find key words in the question or answer choices that are likely to stand out in the passage and will enable you to quickly narrow your search down. These key words will be nouns or verbs in the question or answer choices. Once you’ve identified possible key words, then you should scan through the passage quickly looking for either those key words to be repeated in the passage, or their synonyms to appear in the passage. Once you find a particular part of the passage that either has the exact key word repeated or a
synonym of the key word, you have probably identified the particular part of the passage that will contain the support or justification that you need to correctly answer the question and will allow you to be confident in your answer choice selection.

One warning that should be made here is that often question writers may use the exact same word or wording in their answer choices that are used in the passage, but have done so in such a way as to mislead you. So, simply because a particular word or phrase appears in an answer choice and also appears exactly the same in a passage does not make that answer choice correct. Be sure that you reread the answer choice and consider the context that it is in, to ensure that you are not misled by a cheap trick.

In conclusion, always try to connect the question to the right words in the passage that will allow you to save time in finding the right part of the passage to look in for the answer and will give you the key to the correct answer choice.

Making Proper Inferences

Questions that ask you to make an inference from the passage will require you to use your own personal judgment. Anything directly stated by the author is not an inference. You will need to understand the main idea of the passage in order to make a proper inference about the author’s intent and mindset.

The obvious will not be enough to answer an inference question. You must logically deduce what follows from what the author has stated in
the passage. You are looking for what can be inferred by the passage, not what is directly stated in the passage.

Applying Ideas for Generalizations

Generalization questions are similar to inference questions in that you have to go beyond what is directly stated in the passage by the author. It helps to put yourself again in the author’s shoes. If you were the author and believed in what you had just written, how would you feel about another similar situation? What would either strengthen or weaken your argument. How would you apply the information you have just expressed to a completely different situation?

Using Context Clues

Context clues are a valuable aide in helping you understand difficult phrases or words in the passage. A number of questions will ask you about the meaning of words as they are used in a given passage.

If you already know the definition of the word, or have some familiarity with it, a common mistake is to go with your first impulse and choose the answer that you immediately recognize. However, the reason the test writers may have chosen that particular vocabulary word is because it is used in an unusual context. Therefore, return to the passage and find where the word is used and make sure that you understand how it is being used in the passage.

Copyright © StudyGuideZone.com. All rights reserved.
Once you’ve made your choice of a good definition go back again to the passage and reread that particular section, but mentally replace the answer choice you’ve chosen for the word being asked about.

Example:
A passage states: “He was notorious for making decisions on the spur of the moment...”

Question: Which of the following words, if substituted for the word “notorious” would introduce the LEAST change in the meaning of the sentence?

A. evil
B. disturbed
C. famous
D. despised
E. powerful

If you knew that the most common definition for “notorious” meant being known in an unfavorable sense, then you might be tempted to choose choice A, “evil.”

But once you review back over the passage, choice C, “famous” fits in better into the context of the sentence of passage. Read the sentence again and substitute your chosen answer choice for the word it replaces. This gives you:

““He was famous for making decisions on the spur of the moment...,”” which makes sense and is correct.

Copyright © StudyGuideZone.com. All rights reserved.
Breaking Down Passage Organization

In trying to understand the author’s perspective, you will sometimes be asked about how the passage is organized. Many times, the simplest way to find the answer is to note how the opening sentence in a passage or paragraph relates to the rest of the passage. How does the author’s main idea get developed and broken down into supporting ideas and statements?

As you go through the answer choices for these organization problems, quiz yourself on each answer choice.

Example:
Question: Which of the following best describes the organization of the author’s discussion of this topic?

A. He provides an example – Ask yourself, is there an example in the question? Don’t work exclusively from your memory. Make sure you can go back and actually find the example in the passage.

B. He makes a comparison – Ask yourself, is there a comparison in the question? Again, go back to the passage and actually find the comparison being made and verify that it exists.

C. He makes an acknowledgement – Ask yourself, where is the acknowledgement made and to whom?

D. He discusses a theory – Ask yourself, which theory is being discussed?

E. He praises the research – Ask yourself, where is the praise mentioned?
After each of these initial questions, remember that it is not enough for them simply to be true, they have to answer the question. Simply because the author provided an example, doesn’t make choice A correct. The example provided may have been to support a comparison that he was making and the comparison may be the main method of organization, which in this case would make answer choice B correct. So always read all the answer choices and only choose the one that is the best, not just the first one you read that is factually correct.

**First Word Analysis**

When asked for main ideas that best summarize the passage, an easy strategy is to look at the first words in each answer choice and without looking at the rest of the answer choice, see if you could make a decision based on those first words alone.

Example:
Question: Which of the following best explains the author’s primary purpose?
   A. dispute...
   B. describe...
   C. condemn...
   D. convince...
   E. criticize...

If you know that the passage is fairly neutral about the subject, then even if you know nothing else, you can probably eliminate the stronger
verbs used in answer choices A, C, D and E, leaving you with “describe” or answer choice B as being correct.

Understanding the Intimidation

The test writers will generally choose passages that will be completely foreign to most test takers. You can’t expect the passages to be on a topic with which you have any familiarity. If you do happen to come across a passage that you are familiar with, consider yourself lucky, but don’t plan on that happening.

The passages will also frequently be drawn from longer passages in books, articles, journals, etc. Therefore, the passage that you will face on the test may almost seem out of context and as though it begins in the middle of a thought process. You won’t have a nice title overhead explaining the general topic being covered but will immediately be thrown into the middle of a strange format that you don’t recognize.

Also, while the topics chosen may have originally been interesting reading in their original state, after a particular section is pulled and used for the test passage, it will likely be dry and boring.

Getting hit by strange reading topics that you don’t recognize, of which you may only have a small part of the original selection, and that are dry and boring can be a bit intimidating if you’re not adequately prepared. Just remember that the passages themselves will contain all the information necessary to answer the questions and you don’t need any prior knowledge of the topic in order to succeed and do well on the test.
Finding your Optimal Pace

Everyone reads at a different rate. It will take practice to determine what is the optimal rate at which you can read fast and yet absorb and comprehend the information. This is true for both the flyover that you should initially conduct and then the subsequent reading you will have to do as you go through and begin answering the questions. However, on the flyover, you are looking for only a surface level knowledge and are not trying to comprehend the minutia of details that will be contained in the passages.

You can practice with any form of reading material. Read an article at your normal pace and then after you’re finished, ask yourself some questions about what you just read and see how well you can comprehend. Experiment with reading articles faster and slower and always gauge how well you comprehended what you read at the end. Train your brain to remember the details and absorb the facts.

With practice, you will find the pace that you should maintain on the test while going back through passages. It should be a comfortable rate. This is not a speed reading exercise. If you have a good pace, and don’t spend too much time on any question, you should have a sufficient amount of time to read the different sections of the passages at a comfortable rate. The two extremes you want to avoid are the dumbfounded mode, in which you are lip reading every word individually and mouthing each word as though in a stupor, and the overwhelmed mode, where you are panicked and are buzzing back and
forth through the passage in a frenzy and not comprehending anything.

You must find your own pace that is relaxed and focused, allowing you to have time for every question and give you optimal comprehension. Note that you are looking for optimal comprehension, not maximum comprehension. If you spent hours on each word and memorized the passage, you would have maximum comprehension. That isn’t the goal though, you want to optimize how much you comprehend with how much time you spend reading. Practice will allow you to determine that optimal rate.

**Don’t be a Perfectionist**

If you’re a perfectionist, this may be one of the hardest strategies, and yet one of the most important. The test you are taking is timed, and you cannot afford to spend too much time on any one question.

If you are working on a problem and you’ve got your answer split between two possible answer choices, and you’re going back through the passage and reading it over and over again in order to decide between the two, you can be in one of the most frustrating situations possible. You feel that if you just spent one more minute on the problem, that you would be able to figure the right answer out and decide between the two. Watch out! You can easily get so absorbed in that problem that you lose track of time, get off track and end up spending the rest of the test playing catch up because of all the wasted time, which may leave you rattled and cause you to miss even more questions that you would have otherwise.
Therefore, unless you will only be satisfied with a perfect score and your abilities are in the top .1% strata of test takers, you should not go into the test with the mindset that you’ve got to get every question right. It is far better to accept that you will have to guess on some questions and possibly get them wrong and still have time for every question, than to work on every problem until you’re absolutely confident in your answer and then run out of time on the last few problems.

**Factually Correct, but Actually Wrong**

A favorite ploy of question writers is to write answer choices that are factually correct on their own, but fail to answer the question, and so are actually wrong.

When you are going through the answer choices and one jumps out for being factually correct, watch out. Before you mark it as your answer choice, first make sure that you go back to the question and confirm that the answer choice answers the question being asked.

**Different Viewpoints**

Some passages will express the author’s viewpoint on a topic, along with the viewpoint of other experts or other individuals. This can lead to trouble in answering questions though. If asked for the viewpoint of the author, you might go back to the passage, find where a certain viewpoint is expressed, answer the question based on what you read and move on.
For most passages, that would be fine, but when other viewpoints besides the author’s are expressed, you have to discern who is expressing their opinion in the passage. Make sure that if multiple individuals are giving their viewpoint on a topic, that you sort them out for any questions and associate the right viewpoint with the right individual.
Writing Test

These multiple choice problems will not require knowledge of formal grammar terms, but will require a test taker to identify errors in phrases and sentences and choose the best way to rewrite the phrase or sentence without the error.

Try Every Choice

Just because you think that one of the answer choices sounds best, go ahead and try all of them by plugging each of them into the blank(s) and seeing which one sounds the best. The test writers will be sure to put in additional choices that may sound “close enough,” but you want to make sure that you pick the one that is the absolute best possible answer choice.

Read Carefully

Don’t make the mistake of reading through the sentences carelessly. A prepositional phrase or a tiny word can alter the entire meaning of the sentence.

This is particularly true for transition/hedge words like if, then, therefore, also, sometimes, never, not, and always. These words are particularly critical to watch for, as a word such as “not” can make an answer choice directly opposite of the correct answer choice sound correct.
Apostrophes

An apostrophe is used to form a possessive or a contraction. Check for the following common apostrophe errors. The bracketed parenthetical demonstrates the correct use.

**Possessive Nouns**

1. **Singular possessive nouns.** Use 's to show that a singular noun is possessive [the defendant's motion]. You can apply this rule even when the singular noun already ends in "s" (Charles's costume) though many writers add only the apostrophe [Charles' shoes].

2. **Plural possessive nouns not ending in "s."** Use 's to show that a plural noun not ending in "s" is possessive [the children's toy].

3. **Plural possessive nouns ending in "s."** Add only an apostrophe to make plural nouns possessive [the boys' game].

4. **Nouns that are not possessive.** Do not add an apostrophe to a noun that is not possessive [the teachers (not teacher's or teachers') have claimed; the Joneses (not Jones' or Jones's) did not attend].

**Possessive Personal Pronouns vs. Contractions**

Apostrophe errors with possessive personal pronouns are common because possessive personal pronouns indicate possession and we are
used to using apostrophes to indicate possession. Also possessive personal pronouns are easily confused with contractions. Here are the basic rules:

5. Possessive personal pronouns. Do not add an apostrophe to a possessive pronoun [the problem is hers (not her's); the corporation must disclose its (not it's) assets.]

6. Contractions. Do use an apostrophe in a contraction (it's time to go; you're the one).

* Watch especially for errors in using "it's" or "its." Remember that "it's" means "it is" and "its" indicates ownership. Confusing these two words is the most common apostrophe error.

**Comma Errors**

Commas are also major troublemakers. Watch for these situations:

1. Use a comma to separate two independent clauses joined with a coordinating conjunction (and, or, but, nor, so, for). [The child agreed, but the parent objected].

2. Use a semicolon or a period, not a comma, to separate two independent clauses not joined by a coordinating conjunction [The child agreed; however, the parent objected.]. The following transitional words and phrases are conjunctive adverbs, not conjunctions:
Therefore, do not use a comma to separate two independent clauses on either side of one of these words.

Incorrect: The city must increase its tax base, however, the citizens must be able to accept the additional tax burden.

Correct: The city must increase its tax base; however, the citizens must be able to accept the additional tax burden.

3. Conjunctive adverbs signal the relationship between the point(s) made in the material before their sentence and the material of that sentence. The words and phrases in the list above are examples. When you begin an independent clause with a conjunctive adverb or when you use it in the middle of a sentence, set it off with a comma.

Moreover, the defendant has not yet established a proper foundation for this testimony.

The student, moreover, has not yet turned in an acceptable project to meet his assignment’s requirements.
4. Use commas to set off the year if you also identify the day [The birth of Norma Kelly on June 2, 1974, brought the . . . .], but omit the commas otherwise [The birth of Norma Kelly in June 1974 brought . . . .].

5. Use commas to separate three or more simple items in a list. If the descriptions of the items are long or complex, use semicolons to separate them.

6. Use a comma to separate two independent clauses connected by a coordinating conjunction unless the two independent clauses are short and simple:

Correct: The sunlight helped the flowers to grow, but they require frequent watering in order to stay alive.
Correct: Yours is timely and mine is late.

**Problems With References**

A referent is a word or phrase that refers to something else (an antecedent). Problems with referents can cause confusion and, sometimes, unintended humor. Problems with references occur primarily (1) when sentences have more than one possible antecedent (often caused by placing the referent too far from the intended antecedent); or (2) when the antecedent is only implied. Here are examples problems with references.

More than one possible antecedent
The doctors told their patients that they had serious problems. [Who had problems?]
To prevent children from sucking their thumbs, some parents soak them in tabasco sauce. [Do the parents soak the children or the thumbs?]

The corporate officers had failed to disclose the serious conflicts of interest caused by their ownership of several of T&J's suppliers. The possibility of a bankruptcy was a disaster for them. [Was the possibility a disaster for the officers, the conflicts, or the suppliers?]

Referring to an antecedent that is only implied:

The corporate officers had failed to disclose the serious conflict of interest raised by the possible bankruptcy of T&J's primary supplier. This was a disaster for the officers.

[What was a disaster -- the failure to disclose, the conflict, or the possible bankruptcy?]

Notice that the confusing reference in this last example is caused by using "this" alone. Using the pronoun "this" or "that" without a noun following immediately is usually inadvisable. Here, for instance, the confusion could be resolved easily by adding the clarifying noun after "this":

Copyright © StudyGuideZone.com. All rights reserved.
The corporate officers had failed to disclose the serious conflict of interest raised by the possible bankruptcy of T&J's primary supplier. This failure was a disaster for the officers.

The three primary strategies for solving reference problems are: (1) repeating the antecedent (as in the prior example); (2) re-arranging the material to place the referent close to the antecedent; or (3) re-arranging the material to eliminate the need for the referent. For instance, here is another possible solution to the reference problem above:

The possibility of a bankruptcy was a disaster for the corporate officers. They had failed to disclose the serious conflicts of interest caused by their ownership of several of T&J's suppliers.

**Problems With Agreement**

Here are the most common errors in agreement:

1. The following indefinite pronouns are singular and take a singular verb:
   - anyone: Anyone is welcome.
   - each: Each is an expert.
   - either: Either supports the argument.
   - everyone: Everyone has problems.
   - neither: Neither sings in tune.

   The singular verb is correct even when the indefinite pronoun is followed by a prepositional phrase with a plural noun:
Each of these peaceful alternatives was [not "were"] ignored.

Either of the twins is [not "are"] available.

However, the following indefinite pronouns are either singular or plural, depending on the nouns or pronouns they refer to:

all  
any  
none  
some

For example:
All [singers] are permitted . . . .
All of the money is counted . . . .

None of them are satisfied . . . .
None of the royalty was present . . . .

2. "The court" is a singular term, taking a singular pronoun:

The court overruled the traditional rule originally announced in December. It [not "They"] held that . . . .

3. This same kind of error can slip in when referring to any institution or business:
He said that he is very grateful to St. Catherine's Hospital. They treated him with respect.

The problem sometimes occurs because the writer is avoiding the awkwardness of attributing a human action to an "it." For instance, in the St. Catherine's example, the writer is probably avoiding "It treated him with respect." That problem can usually be solved by changing the antecedent to the humans who actually performed the action:

He said that he is very grateful to the staff at St. Catherine's Hospital. They treated him with respect.

4. Watch for both verb agreement and pronoun agreement when a singular subject is modified by a phrase or clause containing a plural noun:

The confidence of several families was [not were] attained.

Each of the groups agrees [not agree] to resolve the problem peacefully.

Every student who had already taken both courses is [not are] excused from this requirement.

5. Use a possessive pronoun before a gerund phrase. A gerund is an "ing" verb that serves as a noun. The gerund can stand alone or can begin a gerund phrase, but either way, the word or phrase functions as a noun:
Running is good for you.

Coming to work late can result in disciplinary action.

Since a gerund or gerund phrase functions as a noun, it takes a possessive pronoun:

We'll go to their house for the party instead of their [not them] coming to ours.

**Lack of Parallelism**

Where possible, similar ideas should be expressed in a similar (parallel) structure and grammatical form. Parallelism makes for easier reading and clearer meanings. It also improves sentence rhythm and cuts down on verbiage.

Parallel structure:

Parallelism makes for easier reading and clearer meanings.

"easier reading" and "clearer meanings" are parallel.

Non-parallel structure:

Problems occur when the business conceals relevant documents or by deluging the auditors with irrelevant documents.

In the non-parallel example, the writer identifies two situations in which problems occur; however, the two situations are phrased in non-parallel structure. A parallel structure would be:
Problems occur when the business conceals relevant documents or when they deluge the auditors with irrelevant documents.

Now that the structure is parallel, extra words can go:

Problems occur when the business conceals relevant documents or deluge the auditors with irrelevant documents.

Parallel structure is especially important in a list. When the new commander arrived at the post, he immediately posted a new list of orders: no leaves were to be granted, and no leniency was to be given.

**Miscellaneous Problems**

1. Use the subjective case for a pronoun that functions as the subject of an understood verb. The subjective case is the form the pronoun takes when used as the subject of the sentence ("I," "we," "they"). For example, consider these two sentences:

   The corporation's president worked harder than me.

   The corporation's president worked harder than I.

Which is correct? The second version is correct, because "I" is the subject of an understood verb "worked." In other words, the sentence is actually a shortened version of "The corporation's president worked harder than I worked."
This is an easy mistake to make because the correct case may sound wrong. If so, the best solution is to add the understood verb or to rephrase the sentence completely to avoid the awkwardness.

2. Use the subjective case for a pronoun that functions as the complement of a subject. A pronoun is a subjective complement when it actually equals the subject of the sentence. For example, consider these two sentences:

The person least anxious after the test was her.
The person least anxious after the test was she.

Which is correct? The second version is correct, because the pronoun in the predicate, "she," actually equals the subject, "the person least anxious after the test." In other words, the sentence is like an algebra equation: The person least anxious after the test = she. In a sentence like this one, the noun or pronoun in the predicate functions like the subject of the sentence. The sentence should read the same as if you turned it around:

She was the person least anxious after the test.

Once again, this is an easy mistake to make because the correct case may sound wrong. In spoken English we often hear "It's him," or "It's me." Again, the best solution may be to reverse the sentence or to rephrase the sentence completely to avoid the awkwardness.

3. Use "try to" and "sure to" rather than "try and" or "sure and."
Incorrect: Ms. Thompson wanted to try and finish the project by Friday.

Correct: Ms. Thompson wanted to try to finish the project by Friday.

Incorrect: Be sure and pick up the baby from daycare.

Correct: Be sure to pick up the baby from daycare.

This rule makes sense if you think about it. The proper function of the word "and" is to connect two different things. Thus, the "and" in the first sentence should mean that Ms. Thompson wanted to do two different things, but she didn't; she only wanted to do one thing – finish the project. The same is true for the third sentence. The "and" seems to tell the reader that the sentence is an instruction to do two different things, but it isn't. The reader is only to do one thing – pick up the baby.

4. "Hopefully" is an adverb that explains how someone does something, as in "She asked hopefully." Often "hopefully" is misused in this or a similar fashion: "Hopefully the storm will pass." This use actually asserts that the storm’s passing will be full of hope. The writer actually means "I hope that the storm will pass."

5. Watch out for one more common error with adverbs: the difference between "I feel bad" and "I feel badly." In the first
sentence, the writer is commenting on how she feels, either physically (perhaps she has the flu) or emotionally (perhaps she is sad). The first sentence is the proper use of "bad" as an adjective.

However, the second sentence uses "bad" in its form as an adverb. The writer is commenting on her ability to feel; perhaps her fingers are numb. Sometimes writers use the adverbial form "badly" when they mean "bad," perhaps believing that "badly" sounds more elevated.

6. Watch for errors in using "myself" instead of using "I" or "me." "Myself" is used as a reflective pronoun or as a device for emphasis.

Correct: I injured myself.
used as a reflective pronoun

Correct: I will draft the interrogatory answers myself.
used for emphasis

Each time "myself" is used, test the use by asking whether "I" or "me" could substitute for "myself." If so, using "myself" is incorrect.

Incorrect: Ms. Alpha and myself will meet you for lunch.

Incorrect: If you have any questions about this demonstration, contact Mr. Jones or myself.
Getting Ready For Test Day

You’re all set to take your PSAT! Now here are a few things to remember for test day:

Get there early. Know exactly where the test will be held and how you will get yourself there. Pay attention to traffic reports so that you can compensate for any unexpected issues on the road. Leaving early will mean that you’ll be more relaxed; red traffic lights won’t raise your stress level, and you won’t be pulled over by the first officer who has to fill his speeding ticket quota. And most importantly, you’ll have time to use the rest room.

If you’ve got butterflies in your stomach, feed them! You’ve already done all the practice tests you can do, and you’ve had a good night’s sleep. Now it’s time to get a good, healthy breakfast - though it is wise not to overeat. Your body and mind will need the energy; plus it’s distracting to listen to your stomach growl.

Give yourself a massage! Rub your head, neck and shoulders. Place your hand over your heart while taking a very slow, deep breath.

Stay on track. Remember, you don’t want to rush, you only want to perform in a timely manner. Although there are time restrictions, if you misread direction, accidentally fill in the wrong answer-choice, or think illogically due to rushing, it won’t be worth all the time you save. Remember, haste makes waste! Also, keep in mind that incorrect answers don’t count against you, so you can always guess at any answers that you are unsure of. Remember, an educated guess is
better than no guess at all! Moving through a test methodically and efficiently will likely mean that you’ll have more time at the end than if you were to rush and stumble, or dawdle over questions that you’re struggling with.

Most importantly (at least to your sanity), remember that once it’s over, it’s over. Clear your mind of it, because you did your best. Go treat yourself to a hot chocolate or an ice cream cone, catch a movie with some friends and relax!
Post PSAT

After the PSAT, when you’ve had the time to rest and relax from the stress you put your brain through, take the time to critically evaluate your test performance. This will help you gain valuable insight into how you performed, what sort of score you should be expecting (and therefore what schools will be within your scope for application) and the sort of mindset you’ll be expected to utilize when you’re actually in school.

Remember, this is neither an opportunity to over-inflate your ego, nor to put yourself down. The main idea is to make your self-evaluation objective and critical, so that you will achieve an accurate view of how things will pan out.

This doesn’t mean that you should begin a session of “if only I’d...” or “I shouldn’t have...” This will only depress you. The point of this exercise is to keep you grounded, open minded and optimistic.

Soon enough, you’ll receive your score, and the applications will start rolling out. Make it an organized procedure, keeping as prepared and informed as you were with your PSAT, and this will only lead to a bright, successful career in your future!