

TIPS & TRICKS

FOR THE ENGLISH/READING SECTION OF THE SAT

1. Complete Sentences

They must have a subject and predicate.

Subject = what the sentence is about.

Predicate = what the subject is "doing".

2. Colons

Rule 1: complete sentence before the colon

Rule 2: an explanation after the colon

Note: After the colon can be a complete sentence or an incomplete sentence.

3. Semicolons

Must have a complete sentence before and after the semicolon.

A semicolon is interchangeable with a period when the sentences relate.

5. Commas

1. Commas in a list.

2. Commas between two or more adjectives describing a noun.

3. Commas placed around additional information.

4. Commas must be placed before "FANBOYS" when it is a compound sentence.

5. Commas are placed after an introduction and before an afterthought.

6. Commas are placed between an independent clause and a dependent clause when the dependent clause comes before the independent clause.

7. Commas are placed before a quote when the quote is part of the sentence.

4. Em-dashes

1. Two Em-Dash can replace two parenthesis.

2. Two Em-Dash can replace two commas.

3. One Em-Dash can replaces one colon.

6. Pronouns

Pronouns must agree with an antecedent in 3 ways.

1. 1st, 2nd, and 3rd person

2. Singular and Plural

3. Gender (masculine, feminine, neither)

It's = It is

Its = possession

Who's = Who is

Whose = possession

Who = he/she/they

Whom = him/her/them/preposition before

TIPS & TRICKS

FOR THE ENGLISH/READING SECTION OF THE SAT

7. Apostrophes

Contraction = she's, it's, they're, etc.

Singular Possessive = lawyer's, book's, child's, etc.

Plural Possessive = lawyers', books', children's, etc.

8. Subject/Verb Agreement

Singular Subject = no "s"

Singular Verb = has an "s"

Plural Subject = has an "s"

Plural Verb = no "s"

9. Modifiers

The modifier must be directly next to the thing it is modifying.

Example: Walking to the bus stop, the man got drenched with rain.

10. False Comparison

A person must compare to a person.

A place must compare to a place.

Singular = that, this

Plural = these, those

11. Wordiness/Redundancy

Make sure your sentences are as concise as possible.

Also, make sure not to repeat any concepts. Look out for synonyms!

12. Types of Wrong Answers

- 1) Contain extra information or are slightly off
- 2) Represent the opposite of the relationship
- 3) Irrelevant or are just a combination of concepts
- 4) Answers that are plausible interpretations but are not supported by any direct evidence

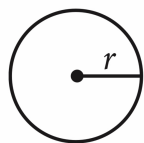
13. Reading Tips!

1. Read above and below the lines
2. Tackle dual passages 1 at a time
3. Complete the main idea questions last
4. Do the passages you are good at first
5. Try to answer the questions before looking at the answer choices
6. If you run out of time for the last passage, don't read the passage. Just refer to the questions with a specific line.
7. Annotate the passages to help you actively read (1-4 word summary after each paragraph)
8. Read the questions first, annotate the passage, and answer the questions as you read.

TIPS & TRICKS

FOR THE MATH SECTION OF THE SAT

1. Circles



Equation of a Circle =
 $(x - h)^2 + (y - k)^2 = r^2$

Center = (h,k) Radius = r

$$A = \pi r^2$$

$$C = 2\pi r$$

2. Arc/Sectors

Length of Arc = $(2\pi r)(\text{degree measure of center arc})/360$

Area of Arc Sector = $(\pi r^2)(\text{degree measure of center arc})/360$

3. Quadratic Equation

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

4. Interior Angles

Formula for Interior Angles = $180(S-2)$

Triangle = 180 degrees

Square = 360 degrees

5. Lines

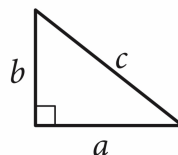
Line Equation $y = mx + b$

m = slope. b = y-intercept

Slope = Rise / Run = $(y_2 - y_1) / (x_2 - x_1)$

Midpoint = $((x_2 - x_1)/2), ((y_2 - y_1)/2)$

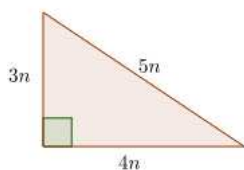
6. Pythagorean Theorem



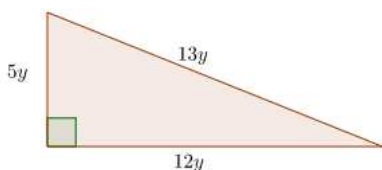
Only used for Right Triangles.

$$c^2 = a^2 + b^2$$

7. Special Right Triangles

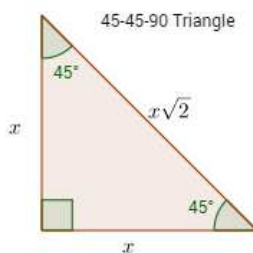


3-4-5 Triangle

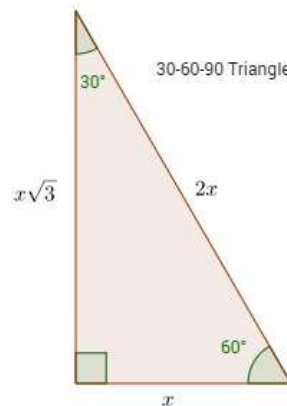


5-12-13 Triangle

Examples of Special Right Triangles



x



x

TIPS & TRICKS

FOR THE MATH SECTION OF THE SAT

8. Trigonometry

SOH CAH TOA

1 Radian = $180/\pi$

1 Degree $\times 180/\pi$ = Radians

9. Probability

Probability of an Outcome = (number of desired outcomes/total number of possible outcomes)

A probability of 1 is guaranteed to happen.
A probability of 0 will never happen.

10. Averages

Mean (Average) = sum of terms/# of different terms

Median = Middle Number

Mode = most common number

Speed = total distance/total time

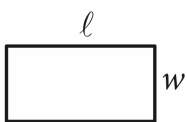
11. Percents

Percent Change = (New-Old)/Old

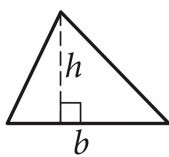
Percent = Part/Whole

Hint: When solving for 11% of a number, solve for 10% and 1% and then add the answers together.

12. Areas



$$A = \ell w$$



$$A = \frac{1}{2}bh$$

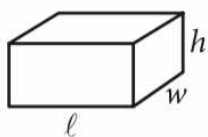
13. Quadratic Identities

$$(x^2 - y^2) = (x+y)(x-y)$$

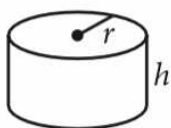
$$x^2 + 2xy + y^2 = (x+y)^2$$

$$x^2 - 2xy + y^2 = (x-y)^2$$

14. Volumes



$$V = \ell wh$$



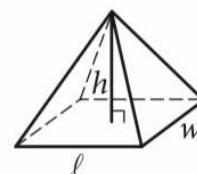
$$V = \pi r^2 h$$



$$V = \frac{4}{3}\pi r^3$$



$$V = \frac{1}{3}\pi r^2 h$$



$$V = \frac{1}{3}\ell wh$$