

grammar

subject-verb agreement

- is/are (singular/plural)
- get rid of modifiers

verb tenses

- past, present, future & perfect tenses
- present perfect (has experienced)
- past perfect (had planned + past action)
- future perfect (will have ...)

pronouns & antecedent

- nominative - adjective - possessive
- I, you, we • me, you, us • my, your, our
- he, they, it her, it, them their, his/hers
- pronoun refers to antecedent

adjectives and adverbs

- noun
- verb (-ly)

modification

- noun → appositive
- verb → adjective → participle
- prepositional phrases & clauses
- LOCATION MATTERS !!

parallelism & comparison

- match in structure
- ing words etc
- prepositions too!
- compare some things
- book with book etc

sentence structure

- complete sentences
- no dependant clauses
- conjunctions

punctuation

- semicolon
- explanations or justification
- complex series
- independent clauses
- colon
- introduce lists
- expand & explanations
- independent clause before
- dashes
- abrupt expressions
- A, B, C - blah...
- introduce a modifier
- skim the passages
- don't worry about time

Stop

- period (.)
- semicolon (;)
- comma + forby
- question (?)
- exclamation (!)

1/2-stop

- colon (:)
- dash
- ↑
- preceded by
- complete


go

- none
- comma
- ↑
- only except
- 2 complete

Trig

- indicators
- trig functions
- 2 types

SOH CAH TOA

EX.  $\sin x = .6 = \frac{3}{5}$ opp hyp

Complimentary rule

- $\sin(x) = \cos(90-x)$
- $\sin x = \frac{4}{5}$ $\cos(90-x) = ?$
- $\frac{4}{5}$ $\sin x$

Functions

- interpretation
- $y = g(x)$ [same!]
- plug-in
- indicators
- $f(?)$ notation

Parabolas

- finding the vertex
- find x & y coordinates
- $-\frac{b}{2a}$ or avg of 2 roots
- plug in & find y
- vertex form
- min is vertex
- $y = a(x-h)^2 + k$ (h, k)
- standard form
- factor to get to it

finding roots

- factor or quadratic
- $-\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

sum of roots

- $-\frac{b}{a}$ } sum
- $\frac{c}{a}$ } product

number of roots

- $b^2 - 4a$ (less; no roots)


Complex Numbers

- $i = \sqrt{-1}$ $i^2 = -1$
- $i^3 = -i$ $i^4 = 1$

simplify equations

- multiply by conjugate

Angles

- indications
- degrees & angles
- parallel lines
-  vertical \angle
corresponding \angle
- total angle formula
- $\text{TA} = 180(n-2)$
- $180(6-2) = 720$

Exponents

- add + subtract
- same base multiplied - add
- same base divided - subtract
- fractional
- denom → root
- numer → exponent
- same base → exp = exp
- multiply
- exp to an exp - mult
- distribution
- to every term

Proportions

- words to #'s
- $\frac{x_1}{y_1} = \frac{x_2}{y_2}$

Unit Circle

- degrees or radians (you know that!!!)


Percents

- indicators
- % symbol
- % OF something
- total %
- % LESS/MORE than something
- total \pm total (%)

Circles

- arc length
- $\text{arc} = \frac{\theta}{360} \cdot 2\pi r$
- sector area
- $\text{sector} = \frac{\theta}{360} \cdot \pi r^2$
- remember angles and circle properties
- circle eq
- (h, k) → vertex
- $(x-h)^2 + (y-k)^2 = r^2$

Standard Deviation

- how spread out data is
- very varied → high
- compressed → low
- BC, skewed, DT
-  low mid high
- range → max-min
- graph if given table

Synthetic division

- indicators
- eq/eq
- synthetic division
- 50% factoring
- 50% division
- answers have remainder
- $x-3 \overline{) x^2 - 2x - 5}$
 $-x^2 + 3x$
 $\hline x - 5$
 $-x + 3$
 $\hline -2$
- $x+1 - \frac{2}{x-3}$ example
- remainder theorem
- denom = 0?
- plug in to top

Systems

- matching rule
- ratio of coef
- no solution → $x=y$
- EX $\frac{x}{\frac{1}{3}} = \frac{y}{\frac{2}{5}} = \frac{z}{\frac{4}{8}}$
- $c=6$
- elimination & substitution

solve for variable

- expression
- mostly easy to find

Similar Triangles

- proportions
- angles = angles & side = side

Word problems

- convert words to eqs
- systems!

Probability

- $\frac{\text{target}}{\text{total}}$ or $\frac{\text{certain}}{\text{all}}$
- only division
- no silly mistakes!

Absolute Values

- equations
- EX. $|2x+1|=5$
 $2x+1=5$ $2x+1=-5$
 $x=2, -3$

inequalities

- EX. $-3 < x+6 < 3$
 $-9 < x < -3$

- reverse method
 - more time on reading
 - less on questions
- only refer back to text
 - if evidence is asked for
- location of evidence
- to define: no primary defs!!!
 - substitute word

- science and history
 - dedicate more time
- cross off answers
- no distractions * *
- read blurbs
- process of elimination
- don't infer anything
 - answers always there