

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 ...)

◦ pronoun & antecedent

- nominative - objective - possessive

• I, you, we • me, you, us • my, your, own

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 & comparision

- match in structure

- ing words etc

- prepositions too!

- compare same things

• book with book etc

◦ sentence structure

- complete sentences

- no dependent 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

z-stop

go

- period(.)

- colon(:)

- none

- dash

- comma

↑
any except

- comm + Farley

↑
preceded by

↑
any except

- question(?)

complete

↑
2 complete

- exclamation(!)

complete

↑
any except

Tips!

Trig.

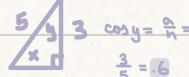
◦ indicators

- trig functions

- 2 types

◦ SOH CAH TOA

$$\sin x = \frac{3}{5} \text{ opp}$$



◦ Complimentary rule

$$\sin(x) = \cos(90^\circ - x)$$

$$\sin^2 x = \frac{4}{5} \quad \cos(90^\circ - x) = ?$$

4/5

Sinx

Word problems

◦ convert words to eqs

◦ systems!

Probability

◦ target certain
total or all

◦ only division

◦ no silly mistakes!

Absolute Values

◦ equations

$$\begin{cases} |2x+1| = 5 \\ 2x+1=5 \\ 2x+1=-5 \end{cases}$$

$$x=2, -3$$

◦ inequalities

$$-3 < x+6 < 3$$

$$-9 < x < -3$$

Functions

◦ interpretation

$$y = g(x) \text{ [some!]}$$

◦ 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

$$y = a(x-h)^2 + k \quad (h, k)$$

◦ standard form

• factor to get to it

◦ finding roots

• factor or quadratic

$$-b \pm \sqrt{b^2 - 4ac} \quad 2a$$

◦ sum of roots

$$\frac{-b}{a} \quad \{ \text{sum}$$

$$\frac{c}{a} \quad \{ \text{product}$$

◦ number of roots

$$b^2 - 4ac \text{ (less; no roots)}$$

Angles

◦ indications

• degrees & angles

◦ parallel lines



◦ total angle formula

$$\text{TA} = 180(n-2)$$

$$180(6-2) = 720$$

Percents

◦ indicators

• % symbol

◦ % OF something

• total %

◦ % LESS/MORE

than something

• total + total (%)

than something

• answers have remainder

Synthetic division

◦ indicators

• eq/eq

◦ synthetic division

• 50% factoring

• 50% division

$$\begin{array}{r} x+1 \\ \hline x-3 \end{array} \left[\begin{array}{r} x^2-2x-5 \\ -x^2+3x+4 \\ \hline x+1 \end{array} \right] \left[\begin{array}{r} x-5 \\ x+3 \\ \hline -2 \end{array} \right]$$

example

Circles

◦ arc length

$$2\pi r \cdot \frac{\theta}{360} *$$

◦ sector area

$$\pi r^2 \cdot \frac{\theta}{360} *$$

◦ remainder angles

and circle properties

◦ circle eq

• (h,k) → vertex

$$(x-h)^2 + (y-k)^2 = r^2$$

Systems

◦ matching rule

◦ ratio of coef

◦ no solution → x=y

$$\begin{array}{ccc} x & y & z \\ \frac{1}{3} & \frac{2}{3} & \frac{5}{3} \\ c=6 \end{array}$$

◦ elimination & substitution

◦ solve for variable

◦ expression

◦ mostly easy to find

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

Similar Triangles

◦ proportions

◦ angles = angles & side = side

Complex Numbers

◦ i = $\sqrt{-1}$ $i^2 = -1$

$$i^3 = -i \quad i^4 = 1$$

◦ simplify equations

◦ multiply by conjugate

Proportions

◦ words to #'s

◦ $\frac{x_1}{y_1} = \frac{x_2}{y_2}$

◦ degrees or radians

(you know this!!!)

◦ degrees or radians

(you know this!!!)

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

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