Preparing for the
SAT and ACT

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The Tests in Context

- No matter what anyone says the single most important thing in college admissions is your high school grades.
- Harder classes count more. Honors, AP, IB, and CHS classes that are harder than regular "academic" classes carry more weight in admissions decisions.
- Great test scores do not make up for average or below average grades.
- High grades show a potential college:
  - Work Ethic – because no one gets high grades by accident.
  - Dedication
  - Determination
  - Discipline

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Test Optional

There are over 1,000 "Test Optional" Colleges and are worth considering.

But… Consider **MERIT SCHOLARSHIPS** that are tied to test scores.   Money Matters.

Ex: Ohio State Schools, WVU, & Kentucky

This is **ONLY** a Test

- Be mindful. Be in the present. Take it one question at a time.
- Remember, at the end of the day, no one will judge you by the results of one Saturday morning. (Well at least not after you are admitted). It is just one day, one test and you can take it multiple times. Relax. Have Fun. And focus on that one test that one day without worrying about future.
- National standardized tests are just ONE way that a potential college has to compare different students from all over.
- Great scores do not guarantee you admission;you have to have the whole package for a competitive school.

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How to **CHEAT** on the SAT & ACT*

1. Steal a Test
2. Take it in Asia when they used to use repeat tests (PR Hot 100)
3. Ear Buds on a Wifi network
4. Use a Calculator that is secretly a cell phone
5. Hire a Proxy - Sam Eshagoff
6. Copy off your neighbor
7. Study released tests - SAT: QAS (OCT, MAR, MAY) & ACT: TIR (APR, JUN, DEC)**

*DISCLAIMER - 3RPrep does not promote cheating

** This IS legal

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What is the best way to PREPARE?

Practice, Practice, Practice

Practice REAL PROBLEMS from OLD tests.
(QAS & TIR)

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What is on the SAT & ACT

1. Reading, *READING passages & questions*
2. English Grammar, *READING passages & grammar mistakes*
3. High School Math, *READING math questions*
4. Science (ACT ONLY), *READING passages with charts and graphs*
5. Optional Essay, (take it), *What & How*

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SAT & ACT Reading

The Answers are ALWAYS _____

Read or Skim the whole passage?

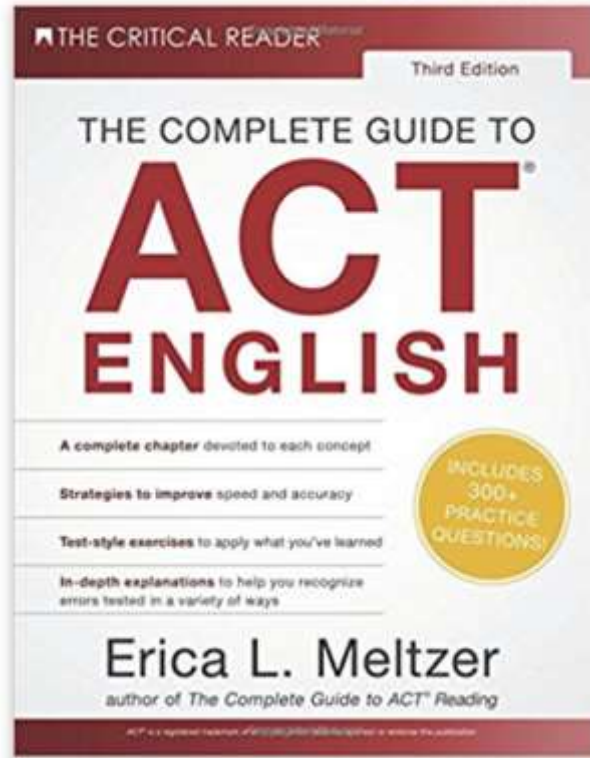Key Words - Where's Waldo

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ACT English

- Apostrophes: Possessive vs. Plural
- Sentences and Fragments
- Joining and Separating Sentences:
  - Periods, Semicolons, Comma + FANBOYS
- Non-Essential and Essential Clauses
- Additional Comma Uses and Misuses
- Colons
- Dashes
- Verbs: Agreement and Tense
- Pronouns: Agreement and Case
- Adjectives and Adverbs
- Word Pairs and Comparisons

- Modification
- Parallel Structure: Lists and Prepositions
- Relative Pronouns: Who(se), Whom, Which, Where, and That

- Shorter is Better: Redundancy and Wordiness
- Diction and Register
- Transitions
- Is it Relevant: Inserting, Deleting, and Replacing Information
- Sentence and Paragraph Order
- Suppose the Writer's Goal

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45. **A.** NO CHANGE
      B. close, yet even
      C. close; even
      D. close. Even

Meltzer

Math Translate: Learn Math Words

Less - A number is 9 less than twice the square of half the number.

More - Three more than twice a positive integer is A) Even B) Odd C)Cannot be determined D) Tuesday

Product - The product of two consecutive prime integers is

Square of - What is the square of 9?

OF & PER - multiply & divide

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Math Strategies: Pick Your Own Number

1. Algebra in the Question -> Algebra in the Answer = Pick your own number.

22. For all $a > 1$, the expression $\dfrac{3a^4}{3a^6}$ equals:

    F. $\dfrac{1}{2}$

    G. $-a^2$

    H. a^2

    J. $-\dfrac{1}{a^2}$

    K. $\dfrac{1}{a^2}$

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Pick Numbers for Algebra

58. For every positive 2-digit number, x, with tens digit t and units digit u, let y be the 2-digit number formed by reversing the digits of x. Which of the following expressions is equivalent to $x - y$?

   F. $9(t - u)$
   G. $9(u - t)$
   H. $9t - u$
   J. $9u - t$
   K. 0

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SAT Rational Functions: Zero or One

Which of the following is equivalent to $\dfrac{4x^2 + 6x}{4x + 2}$?

A) x

B) $x + 4$

C) $x - \dfrac{2}{4x + 2}$

D) $x + 1 - \dfrac{2}{4x + 2}$

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Math Strategies: Back Solve (Great for Inequalities)

36. Which of the following is equivalent to the inequality
$4x - 8 > 8x + 16$?

F. $x < -6$
G. $x > -6$
H. $x < -2$
J. $x > 2$
K. $x < 6$

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"How Many…" & "What is…?" is always "X"

47. Tom has taken 5 of the 8 equally weighted tests in his U.S. History class this semester, and he has an average score of exactly 78.0 points. How many points does he need to earn on the 6th test to bring his average score up to exactly 80.0 points?

A. 90
B. 88
C. 82
D. 80
E. 79

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"What IS…?" is "X"

46. A container is $\frac{1}{8}$ full of water. After 10 cups of water are added, the container is $\frac{3}{4}$ full. What is the volume of the container, in cups?

F. $13\frac{1}{3}$

G. $13\frac{1}{2}$

H. 15

J. 16

K. 40

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Ratio Box

18. Janelle cut a board 30 feet long into 2 pieces. The ratio of the lengths of the 2 pieces is 2:3. What is the length, to the nearest foot, of the shorter piece?

- **F.** 5
- **G.** 6
- **H.** 12
- **J.** 15
- **K.** 18

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Ratio Box

2:3

2	3	5
		30

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Fractions

37. For all real numbers x such that $x \neq 0$, $\dfrac{4}{5} + \dfrac{7}{x} = ?$

A. $\dfrac{11}{5x}$

B. $\dfrac{28}{5x}$

C. $\dfrac{11}{5+x}$

D. $\dfrac{7x+20}{5+x}$

E. $\dfrac{4x+35}{5x}$

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Powers of 2: $8 = 2$^3; $2 = 8$^($⅓$)

14

If $3x - y = 12$, what is the value of $\dfrac{8^x}{2^y}$?

A) 2^{12}

B) 4^4

C) 8^2

D) The value cannot be determined from the information given.

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Powers of 2

49. In the real numbers, what is the solution of the equation $8^{2x+1} = 4^{1-x}$?

    A. $-\dfrac{1}{3}$

    B. $-\dfrac{1}{4}$

    C. $-\dfrac{1}{8}$

    D. 0

    E. $\dfrac{1}{7}$

Average is just an Average - don't sweat it

28. The average of a list of 4 numbers is 90.0. A new list of 4 numbers has the same first 3 numbers as the original list, but the fourth number in the original list is 80, and the fourth number in the new list is 96. What is the average of this new list of numbers?

F. 90.0
G. 91.5
H. 94.0
J. 94.5
K. 94.8

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Median Shows up too

51. The list of numbers 41, 35, 30, X, Y, 15 has a median of 25. The mode of the list of numbers is 15. To the nearest whole number, what is the mean of the list?

A. 20
B. 25
C. 26
D. 27
E. 30

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ALWAYS, ALWAYS, ALWAYS...

Probability

Percent

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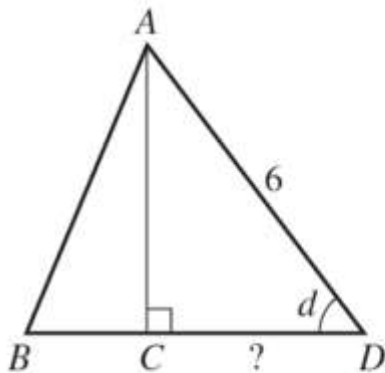# Factoring & FOILing: Difference of the Squares

If $x^4 - y^4 = -15$ and $x^2 - y^2 = -3$, what is the value of $x^2 + y^2$?

A) 5

B) 4

C) 2

D) 1

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ACT: Cannot be determined (only 20 & under)

52. In $\triangle ABD$, shown below, C is on $\overline{BD}$, the length of $\overline{AD}$ is 6 inches, and $\sin d = 0.8$. How many inches long is $\overline{CD}$?

F. 1.2
G. 1.8
H. 3.6
J. 4.8
K. Cannot be determined from the given information

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Grammar

- Apostrophes: Possessive/Plural
- Joining and Separating Sentences: Periods, Semicolons, comma + FANBOYS
- Non-Essential Clauses
- Colons
- Dashes
- Verbs
- Pronouns
- Adjectives/Adverbs

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Grammar

- Everything you needed to know about grammar you learned (and forgot) in 7th grade.

  - Parts of speech

    - Prepositions

  - Punctuation

    - What are semicolons?

    - What are colons?

    - Where do commas go?

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Joining and Separating Independent Clauses

- We've had several snow days this year   I hope we have at least one more

    - Period

    - Semicolon

    - Comma + FANBOYS

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Knowing the Rules

45. **A.** NO CHANGE
B. close, yet even
C. close; even
D. close. Even

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And again . . .

50. F.   NO CHANGE
    G.   frieze; into which are carved
    H.   frieze. Into which are carved
    J.   frieze, carved into it are

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Grammar which doesn't sound wrong.

- Everyone should bring their books to class tomorrow.

- Less/Fewer

- Who/Whom

Him, Them, Whom, Him, Them, Whom

storytellers <u>where they</u> use songs, poems, and narration to
₃₃
help preserve and transmit culture and history. [7] Clearly

33. **A.** NO CHANGE
    B. who
    C. whom
    D. that they

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The Answer is **Always** in the Passage

2. The narrator describes the photos by Bombay's first great photographers as primarily inspiring the narrator to:

   F. turn away from a career in photography.
   G. create grand panoramas of the new Bombay.
   H. produce images that his father would add to his collection.
   J. photograph subjects that depict everyday life on Bombay's streets.

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fallen palaces of the great. The early city's relics filled his imagination as well as his photo albums. It was from my father that I learned of Bombay's first great photographers, Raja Deen Dayal and A. R. Haseler, whose portraits of the city became my first artistic influences, if only by showing me what I did not want to do. Dayal climbed the Rajabai tower to create his sweeping panoramas of the birth of the city; Haseler went one better and took to the air. Their images were awe-inspiring, unforgettable, but they also inspired in me a desperate need to get back down to ground level. From the heights you see only pinnacles. I yearned for the city streets, the knife grinders, the water carriers, the pavement moneylenders, the peremptory soldiers,

Testing Timer

Phil@3RPrep   David@3RPrep

- Email us for:
- 1. Copy of this presentation
- 2. A great ACT Math Formula Sheet (that I stole)
- 3. Meltzer's greatest Hits.
- 4. A free tutoring session ($150 value)

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