

Gabe

SAT

①

7/31/07

p. 492 Writing

#10 | A) Misplaced Modifier (Who was lacking?)

B) I ✓, better to ventura mistakes first.

~~C) sure...~~

D) I ✓,

~~E) Graph~~ did not lack instruction

#14 | "although their common language is English"

↳ is an appositive because it is

separated by commas. TIP: Try reading

the sentence without the appositive. This

allows you to simplify the sentence.

"~~Thus~~ The city is ..... who (although ... English) speak"

p. 518 Math

#4 |  $f(-3) > f(3)$

D)  $f(3) = 4 - 3^3 = \text{~~18~~} - 27$

$$f(-3) = 4 - (-27) = 31$$

In this case,

$f(-3)$  means plus

in -3 for  $x$ , and

$f(3)$  means plus

in 3 for  $x$ .

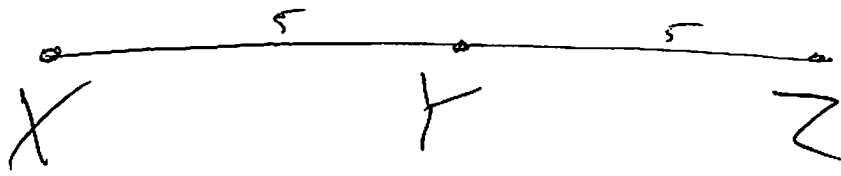
Then compare the

two, and try to find

the function where -3 yields

a higher answer.

#6) TIP: Whenever the question describes a figure but does not provide an illustration, draw one yourself.



(E)

#8) **Recognition:** Variables in the answer choices mean you can plug in for those variables!

- ③  $k = 72$
- ④  $n = 3$
- ②  $x = 25$

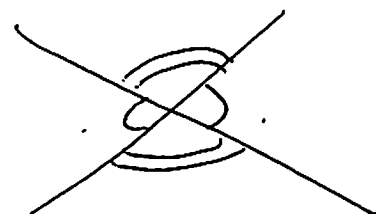
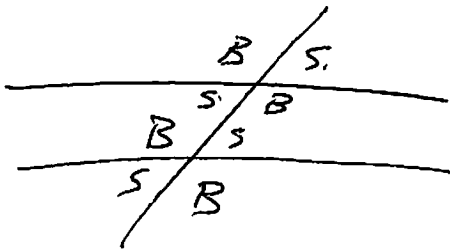
(A)

TIP: you may need to shift the #'s around somewhat to make sure that they fit the requirements of the problem.

#9) Parallel Lines & a Transversal (line that cuts through)

create equal angles.

TIP: only consider one transversal at a time.



$B = B$   
 $S = \text{SMALL}$   
 $B + S = 180^\circ$

TIP: Vertical Angles are always equal.

6ake

SAT (3)

7/31/07

P. 518 Math

#13

TIP: Keep it vertical  $\updownarrow$

$$C(x) = \frac{600x - 200}{x} + K$$

$$640 = \frac{600(20) - 200}{20} + K$$

$$640 = \frac{12000 - 200}{20} + K$$

$$640 = \frac{11,800}{20} + K$$

$$640 = 590 + K$$

$$K = 50$$

B

remember that

this is

a function,

so you do not

multiply.

$$C(x) = \overset{\text{total}}{\text{cost}}$$

$$C(20) = 640$$

Katherine

SAT

7/31/07

Good College Book organized by majors:

Russ's Recommendations

Math p. 487

#4 | Notice that ~~by~~ buying in bulk decreases the cost per donut.

[B]

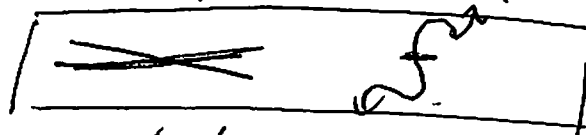
12 → \$ 3.59

6 → 1.89

(1+3) → 1.20

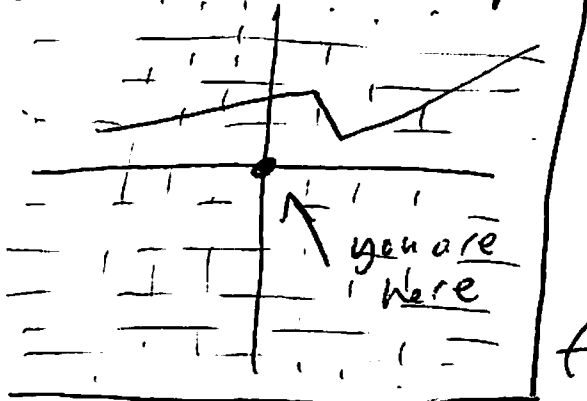
\$ 6.68

#5 | A function is a relationship between two numbers.



- All functions can be graphed on a coordinate plane.

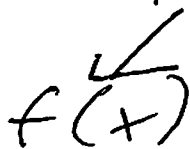
Your goal: to reach to graph.



common function symbols:

$f(x)$ ,  $h(x)$ ,  $g(x)$

$h(-2) = 2$
$h(-4) = 1.5$
$h(-6) = 1$



$(x)$  represents how far left/right ( $\leftrightarrow$ )

$f(x)$  represents how far up/down ( $\updownarrow$ )

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#7

$$x^{-\frac{1}{2}} = \frac{1}{3} \text{ and } y^z = 16 \quad z > y$$

negative powers - review

~~9^{-2}~~

$$9^{-2} = \frac{1}{9^2} = \frac{1}{81}$$

$$3^{-3} = \frac{1}{3^3} = \frac{1}{27}$$

Fractional powers review

$$9^{\frac{1}{2}} = \sqrt{9} = 3$$

$$27^{\frac{1}{3}} = \sqrt[3]{27} = 3$$

$$32^{\frac{1}{5}} = \sqrt[5]{32} = 2$$

$$x^{-\frac{1}{2}} = \frac{1}{x^{\frac{1}{2}}} = \frac{1}{\sqrt{x}} = \frac{1}{3}$$

↓  
make power positive  
put under 1

↓  
turn into  
root  
notation

$$\sqrt{x} = 3$$

$$\boxed{x = 9}$$

$$9 + 4 = 13$$

$\boxed{D}$

$$y^z = 16, \quad z > y$$

guess and check

$$2^4 = 16, \quad 4 > 2 \quad \checkmark$$

$$\boxed{\begin{matrix} y = 2 \\ z = 4 \end{matrix}}$$

Katherine

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7/31/07

P. 489 Math

#9 | When a problem says "if A...."

then you need to make A true.

So, find a # that has a remainder of 3 when divided by 5.

TIP: Think of remainder as the # left on the bottom

$$\begin{aligned}
 2p + 7 &= 18 \\
 2p &= 11 \\
 p &= \frac{11}{2}
 \end{aligned}$$

TIP: If the answers are just regular #s (constants), plus them in.

$$\begin{array}{r}
 \phantom{5} R3 \\
 5 \overline{) AB} \\
 \underline{- C} \\
 \phantom{0} \textcircled{3}
 \end{array}$$

$$\begin{array}{r}
 \phantom{5} R3 \\
 5 \overline{) 18} \\
 \underline{- 15} \\
 \phantom{0} \textcircled{3}
 \end{array}$$

$$\begin{array}{r}
 \phantom{5} R3 \\
 5 \overline{) 8} \\
 \underline{- 5} \\
 \phantom{0} 3
 \end{array}$$

A)  $2(2) + 7 = 11$  X

**B)  $2(3) + 7 = 13$  ✓**

$$\begin{array}{r}
 \phantom{5} R1 \\
 5 \overline{) 11} \\
 \underline{10} \\
 \phantom{0} 1
 \end{array}$$

C)

D)  $2(5) + 7 = 17$  X

E)

$$\begin{array}{r}
 \phantom{5} R2 \\
 5 \overline{) 17} \\
 \underline{15} \\
 \phantom{0} 2
 \end{array}$$

$$\begin{array}{r}
 \phantom{5} R3 \\
 5 \overline{) 13} \\
 \underline{10} \\
 \phantom{0} 3
 \end{array}$$

#10 | TIP: test the principle with smaller #s.

What if she were the 3rd tallest and  
3rd shortest?

B



Stacy

you thought: 6 students  
actually: 5 students.

now consider  $\rightarrow$  12<sup>th</sup> tallest/shortest:

you thought: 24 students

actual answer: (23) students

p.489

too easy for #10!

p. 490 Math

#11 | negative constants

↳ don't change. fixed value.  
(just regular numbers,  
no variables.)

TIP: Whenever a question provides you with the equation for a graph, enter the equation into your graphing calculator and graph it!

$$a = -2$$

$$b = 5$$

$$c = -10$$

$$y = -2x^2 + 5x - 10 \Rightarrow \text{Graph}$$

A is most similar

TIP: Always try plugging in 0 for  $x$

Realize  $\Rightarrow$  when  $x = 0$ ,  $y$  must be negative

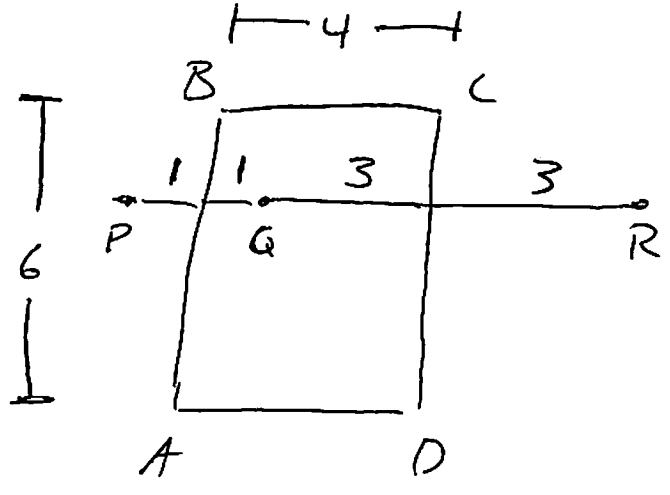
#12 | "symmetric about line  $\overline{AB}$ " =

$P$  and  $Q$  are the same distance from line  $AB$   
at all points on  $AB$ .

TIP: When confused on math, always consider plugging in.



#12 cont.



#13	PERCENT REVIEW
	ex. 25% of 100
	↓ ↓ ↓
	(.25) × (100)
	3% of 200
	↓ ↓ ↓
	(.03) × (200)

initial price  $\Rightarrow$  \$100

+ 10%  $\Rightarrow$  \$110

**C**

$$-(25\% \text{ of } 110) = \boxed{\$82.50}$$

$$\begin{aligned} &\downarrow \\ &(.25 \times 110) \\ &27.50 \end{aligned}$$

#14 Word-to-math translation.

**E**

$$4w = w + 4$$

$$\boxed{3w = 4}$$

TIP: Pay close attention to what the question is asking for!

$$\begin{array}{r} 4w = w + 4 \\ -w \quad -w \\ \hline 3w = 4 \end{array}$$

Math p. 518

#1 | Be careful! Take your time and write everything out.

Alternate Option:

plug in the answers!

How do you know you can do this?

$$\begin{array}{r} 3x + 9 = 5x + 1 \\ -3x \qquad -3x \\ \hline \end{array}$$

$$9 = 2x + 1$$

$$\begin{array}{r} -1 \qquad -1 \\ \hline \end{array}$$

$$8 = 2x$$

$$\boxed{4 = x}$$

**D**

Constants in the answer choices.

#8 | Math Tip: Always look at the answers first! They will often help you determine how to approach the problem.

VARIABLES IN THE ANSWERS  $\rightarrow$  PLUG IN FOR THOSE ANSWERS

**A**

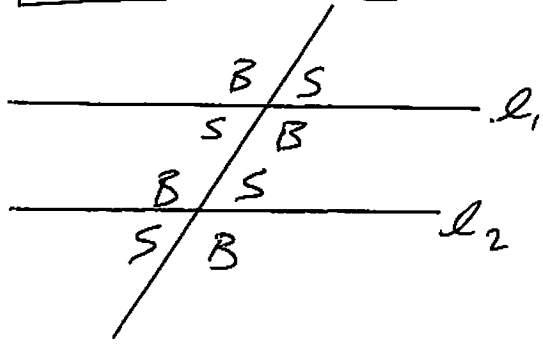
$$n = 5$$

$$x = 10$$

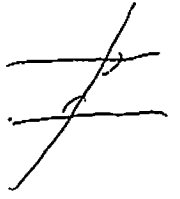
$$k = 47$$

$$A) nx - 3 = k \qquad 5(10) - 3 = 47 \checkmark$$

Math p. 520



$l_1 \parallel l_2$



B = big angle

S = small angle

$$B + S = 180^\circ$$

P.600 Writing

#10 | Misplaced modifier → Who was criticized?

D

Anelia Eckhart.

So this must come immediately after the comma

#16 | Reminder: each is singular

Singular pronouns

E

Either (one) ... is

Each (one) ... is

Neither (one) ... is

None ... is

#20 | <sup>The</sup> Agency = it, not they. B

#21 | • C "still a threat to travelers"

Reminder: Read slowly and carefully, especially the underlined parts.

#23 | E no error

#30 | ~~A) no subject~~  
B) "I" is the subject  
~~C) passive~~

~~A) no subject~~  
~~E) no subject~~

P.606 C.R

#4 | C Although they took advantage of it, they did not create it.

---

#7 | Brevity  $\Rightarrow$  ~~the state of being~~ <sup>appease  $\Rightarrow$  make happy</sup>  
briety of duration

Blanks: extend

①	②
<del>A</del>	A
<del>B</del>	B
<del>C</del>	<u>C</u>
D?	D
<del>E</del> doesn't necessarily extend	E

#11 | Observation: much less is known b/c we have yet to decipher the script.

B

Assumption: The script helps us know more.

Tip: If the argument is  $A \rightarrow B$ , the assumption is  $B \rightarrow A$ .

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#12 |

A)

B)

C) unsure

D) "not totally useless"

E) too strong

Andrew

SAT

8/1/07

P. 608 C.R

#16 | TIP: Always read the topic sentence

D

of the paragraph to which the question refers.

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Jake Math p. 423

SAT

8/1/07

#1 | Be careful! Write everything down.

$$5t = 45$$

$$t = 9$$

$$tk = 1$$

$$9k = 1$$

$$k = \frac{1}{9}$$

**B**

#5 | TIP: You don't have to use the table.

$$1.5 \times 4 = 6$$

$$\text{lunch} = 1$$

$$\frac{1}{4} \times 2 = .5$$

7.5 hrs

**D**

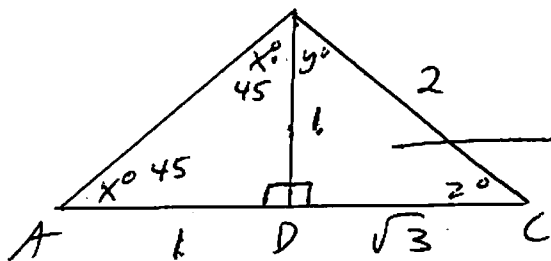
#6 | Math is exact opposite of C.R b/c you always want to look at the answers first. This is b/c the answers will help you determine how to approach the problem.

TIP: If answers include numbers without variables (constants), you can often plug in the answers.

A)  $2x - 5 = 5$ ,  $x + 1 = 6$ ,  $3x - 8 = 7$  ✓

**A**

#9 notice the  $\sqrt{3} \rightarrow$  double-check your special triangle ratios.



notice to special ratio  $\rightarrow$  this is a 30/60/90 triangle!

equal angles = equal sides (opposite of angles)

$2 = 30$

**D**

smallest angles = smallest sides  
largest angles = largest sides

**TIP:**  
Remember that geometry formulas are at beginning of each section.

~~very important!~~

#10 Word-to-math translation

30% of 40% of (a pos. #) is

$(.3) \times (.4) \times A = .12A = \frac{.2wA}{100}$

$(.3)(.4)a = (.2)\left(\frac{w}{100}\right)a$

$12 = .2w$   
 $60 = w$  **B**

(20 percent) of (w percent) of (the same #)

not .w because this does not work for #'s 1-10 (ie, 3%  $\neq$  .3)



Jake

SAT

8/1/07

Math p. 425

#13 Plus in for n.

n = (5) input  
answer = (11) output

#14 Exponent Review

Fractional Exponents

$$9^{\frac{1}{2}} = \sqrt{9} = 3$$

$$27^{\frac{1}{3}} = \sqrt[3]{27} = 3$$

$$81^{\frac{1}{4}} = \sqrt[4]{81} = 3$$

Negative Exponents

$$9^{-2} = \frac{1}{9^2} = \frac{1}{81}$$

$$3^{-3} = \frac{1}{3^3} = \frac{1}{27}$$

etc.

~~$a^2 - ab + ab - b^2$~~

$(a+b)(a-b) =$   
 $a^2 - b^2$

$$(a+b)^{\frac{1}{2}} = (a-b)^{-\frac{1}{2}}$$

$$\frac{\sqrt{a+b}}{1} = \frac{1}{\sqrt{a-b}}$$

cross multiply

$$\boxed{a^2 - b^2 = 1}$$

$$\boxed{E}$$