



TEST PREP AND
ADMISSIONS

SAT^{®*}

**Sample Test 1
Answers & Explanations**

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Section 1 (Writing: Essay)

Grade 6 Essay

The concept is intriguing. If desire can be “invented,” then any product, any service, any theory is potentially a success. All that is needed is a marketing plan and access to potential customers. Invent the desire, and then sit back and collect the profits.

The concept is also frightening. If desire is an artificial concept, then what becomes of the concept of free will? If judgment can be overridden by packaging and promotion, are any of us really free at all? Could the very notion of democracy be destroyed by a good press agent?

Fortunately, I don’t believe that true desire can be invented. The most that advertising can create is awareness. Sometimes that awareness is created in a way that makes the product seem more desirable than it actually is. Movie trailers, for example, take the most exciting moments of a film and pack them into sixty seconds, to make the audience believe that the entire two hours will be that action-packed. The tall, juicy burgers seen in fast food commercials bear little resemblance to the wrapper-flattened sandwiches handed through most drive-up windows. Diet programs tout clients who have lost hundreds of pounds, only admitting that “these results are not typical” in small print.

How, then, can you account for the apparent success of so much advertising? In some cases, simply creating the awareness can be enough. If a person saw and liked the first two Harry Potter movies, all they really need to be told is when the next one will be released, and what theaters will be showing it. Mostly, however, I think what advertising provides is a bridge between the product and some desire already present in the consumer. A successful cosmetics commercial won’t “invent” a desire for a certain brand of lipstick as much as it will establish a connection between that brand of lipstick and a woman’s desire to feel attractive. An ad that associates a product with a celebrity connects anyone who uses that product to that celebrity, even if its only in an indirect way. A burger commercial can be successful just by making people feel hungry.

The advertising industry may strive to “invent desire,” but I don’t believe it can be done. (I do, however, still tend to fall for those movie trailers!)

Grader’s Comments: All essays are evaluated on four basic criteria: Topic, Support, Organization, and Language. The author here states her position clearly. She presents several examples and develops them well, and the essay stays on topic.

The essay’s structure is consistent and easy to follow, thanks to the author’s use of transitions and keywords (*also, for example, in some cases*). The author ends with a strong conclusion that summarizes her main point. The strong organization and structure of this essay show that the author took sufficient time to plan before she began to write.

Grammatically, the essay is consistent and accurate, although there are a few errors (*concept* is used twice in the second sentence of the second paragraph; the plural *they* is used to refer back to the singular *a person* in the third sentence of the fourth paragraph; the contraction *it’s* is misspelled in the next-to-last sentence of paragraph four). The author uses a variety of high-level sentence structure and language (*intriguing, tout, strive*), showing that she took time to edit and giving additional strength and polish to her essay.

Grade 4 Essay

It would be easy to dismiss the notion of “inventing desire” as being something that is beyond the ability of a mere ad or commercial. We all like to think we can’t be effected by a simple sales pitch. But advertising is a multi-million dollar industry, so somebody must be doing something right.

One example might be a commercial for a new car. If this car is extremely expensive. Someone who doesn’t have a lot of money might know that this not a car they can afford. But the commercial tells them that this is the kind of car people drive who are successful. It tells them, you deserve this car. Gradually, the person begins to want this car, even though they didn’t want it before. Desire has been invented.

The same can be said also for commercials that advertise luxury cruises or vacations. Consciously, a person might know that they cannot afford an expensive cruise. They may not have ever considered taking a cruise before. Then they see a commercial that makes this cruise seem incredible. It might even that this cruise is less expensive than other cruises. The person’s better judgment might be overrun by their desire to have what other people have, a desire invented by the advertising.

On the other hand, not all commercials succeed in “inventing desire.” if they did, there would be no movies that were flops. The movie studio would simply buy more advertising. If a person doesn’t like action movies or romantic comedies, they aren’t going to go, no matter how good the commercials are.

Advertising isn’t foolproof, but it can definitely invent desire where there previously wasn’t any.

Grader’s Comments: All essays are evaluated on four basic criteria: Topic, Support, Organization, and Language. The author begins this essay well, stating his point of view clearly. He then offers two examples for support, although they could be more fully developed.

Organization is satisfactory, and the author does use some keywords and transitions (*One example, The same can be said, On the other hand*). The essay loses focus slightly in the fourth paragraph, where the author seems to be arguing against his own position.

There are a number of errors in this essay (*effected* is used in the first paragraph where the author means “affected,” the second sentence in the second paragraph is a fragment, there’s a word missing in the first sentence in paragraph three, the author repeatedly uses the plural pronoun *they* to refer to singular antecedents). Better pacing would leave the author with time to proofread, and familiarity with Kaplan materials might help some of the grammatical and usage errors.

Grade 2 Essay

It seems to me that “desire” can be “invented” by advertising, otherwise why would companies spend so much money on commercials, ads, etc.? Advertising agencies, such as Chiat-Day in Los Angeles, California, even win awards for this advertising. This must mean that they are successful in “inventing desire” for things people would not otherwise even want.

There have been lawsuits against McDonald’s, saying it’s their fault that people eat “Super Size” meals and get fat. And how did these people even know to Super Size, because it’s in the commercials. Of course, the commercials don’t tell you how much calories and fat the Super Size meals have, only that you get more for the money and they taste good. If it wasn’t for the commercials, those people would probably just order the regular size of meal.

This is a good example of advertising inventing the desire for a Super Size meal, even if it isn’t good for you.

Grader’s Comments: All essays are evaluated on four basic criteria: Topic, Support, Organization, and Language. This essay stays on topic by starting with an introduction based on the prompt. The author doesn’t provide much support for her opinion, however, offering only one example, and not developing it fully. Most of what the author uses to support her opinion is simply rewordings of the prompt. To improve on this aspect of her writing, the author should spend more time planning her essay and brainstorming her examples before she begins to write.

Although the essay is not too difficult to follow, it does not contain strong transitions between paragraphs, and keywords are lacking. The author needs to plan with a clear outline and use transition words to help guide her as she writes.

Lastly, the essay contains numerous spelling and grammatical errors—*It seems to me* uses the pronoun without an antecedent; *there* is misused for “their,” *much* is used where “many” would be correct—as well as errors in sentence structure. Spending time on the Kaplan SAT grammar review materials and leaving time to proofread to correct mistakes would help this author to improve the language of her essay.

Section 2 (Math)

1. **D** **Category:** Graphs and Charts

Difficulty: Low

Strategic Advice: On Test Day, a few questions will focus on your ability to interpret graphical data, so make sure you work carefully with any charts or graphs, even in relatively uncomplicated situations such as this one.

Getting to the Answer:

$$25\% \times 1.8 \text{ million} = \frac{1,800,000}{4} = 450,000$$

2. **E** **Category:** Variation

Difficulty: Low

Strategic Advice: Since the numbers vary inversely, use the equation $B = \frac{k}{A}$, where k is a constant. Use the given values of A and B (the number of each type of jellybean) to find k , then use k to calculate the number of green jellybeans in the second case.

Getting to the Answer:

$$25 = \frac{k}{50}$$

$$1,250 = k$$

$$\frac{1,250}{5} = 250$$

3. **E** **Category:** Lines and Angles

Difficulty: Medium

Strategic Advice: Probably the most important Test Day insight raised by this question is the importance of keeping your eyes on the right prize: Most of your initial work will center on x , but remember that you're asked about y .

Getting to the Answer:

$$2x + 60 = 180$$

$$x = 60$$

$$60 + 4y = 180$$

$$y = 30$$

4. **D** **Category:** Ratios: Low and Medium Difficulty

Difficulty: Low

Strategic Advice: It's never a bad idea to begin a ratio question by pinpointing whether you're asked to deal with a part : part ratio, a part : whole ratio, or possibly both types. In this case, you simply need a proportion between two part : part ratios.

Getting to the Answer:

$$\frac{8}{5} = \frac{w}{40}$$

$$5w = 320$$

$$w = 64$$

5. **A** **Category:** Exponents: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: Often the challenge of a question is not in any single maneuver it may require of you, but in the number of such maneuvers. Here, for example, as you deal with the equation, it's vital that you keep in mind the limits imposed by the inequality. And then it's vital to answer the exact question asked.
Getting to the Answer: If $x < y$ and $x^y = 16$ (given that you're dealing with positive integers), $x = 2$ and $y = 4$.
 $2 - 4 = -2$

6. **C** **Category:** Exponents: High Difficulty
Difficulty: High
Strategic Advice: Here's an example of one of the 2005 SAT's new topics that has so many test takers anxious: manipulation of negative and rational exponents. But as you work through the solution, notice that basically everything you do is a variation on some core exponent rule that you're probably already familiar with. The point? Be calm, and know your exponent rules.
Getting to the Answer: To get n , you'll eventually want to set the exponents equal to each other. But because you can do so only if the bases are equal, begin by re-expressing $\left(8^{\frac{4}{n}}\right)^{-3}$ so that its base is 2:

$$\left(8^{\frac{4}{n}}\right)^{-3} = \left(2^3\right)^{\frac{4}{n} \cdot -3}$$

$$\text{Because } (a^b)^c = a^{bc}, \left(2^3\right)^{\frac{4}{n} \cdot -3} = 2^{(3)\left(\frac{4}{n}\right)(-3)} = 2^{\frac{-36}{n}}.$$

$$\text{Similarly, } (2^{-n})^{\frac{3}{4}} = 2^{(-n)\left(\frac{3}{4}\right)} = 2^{\frac{-3n}{4}}.$$

$$\text{Now simply set the exponents equal: If } 2^{\frac{-36}{n}} = 2^{\frac{-3n}{4}}, \text{ then } \frac{-36}{n} = \frac{-3n}{4}.$$

$$-144 = -3n^2$$

$$144 = 3n^2$$

$$48 = n^2$$

$$\pm 4\sqrt{3} = n$$

$$4\sqrt{3} = n, \text{ since you were given that } n > 0.$$

7. **C** **Category:** Compound and Other Tougher Functions
Difficulty: Medium
Strategic Advice: Here you have another of the new 2005 topics: function notation and evaluation. You may or may not have studied this topic in school, but it won't be a problem once you get a few issues under your belt. The most relevant issue here is that function questions, especially those of relatively low difficulty, frequently boil down to plain old substitution—so don't let the fancy notation trip you. $f(g(3))$ is read "f of g of 3" and, given the functions in this question, essentially means "If $x = 3$, first tell me the value of $x^2 - 1$, and then take that result and plug it in to $x^2 - x$. What you wind up with is the answer."
Getting to the Answer:
 $g(x) = x^2 - 1$, so $g(3) = 3^2 - 1 = 8$
 $f(x) = x^2 - x$, so $f(8) = 8^2 - 8 = 56$

8. **B Category:** Positives and Negatives
Difficulty: Medium
Strategic Advice: You don't know the actual values of X or Y —or, for that matter, of P , Q , R , S , or T —but you don't need to. Focus on what *kinds* of numbers they are.
Getting to the Answer: You know that X is a negative fraction (say $-\frac{1}{2}$) and that Y is a positive fraction (say $\frac{1}{2}$).
 Then XY is a negative fraction greater than X (in this case, $-\frac{1}{4}$) which looks just about where Q is.
9. **A Category:** Inequalities: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: Many test takers think inequalities are tough, but the number of truly tough inequality questions on the SAT is far less than commonly thought. The key to inequalities is to handle them for the most part in the same way you would handle an equality—that is, an equation. The one big exception: If you multiply or divide an inequality by a negative number, remember to reverse the direction of the inequality sign.
Getting to the Answer:
 $5a - 2 > 41$
 $5a > 43$
 $a > 8.6$
10. **C Category:** Sequences
Difficulty: Medium
Strategic Advice: The trick to sequence questions like this one is to first get a firm grasp on the relationship between consecutive terms. Once you have that, simply apply the relationship again and again, until you get to the value of the term you need.
Getting to the Answer:
 $65 = 2z - 1$
 $66 = 2z$
 $33 = z$
 $z = 2y - 1$
 $33 = 2y - 1$
 $34 = 2y$
 $17 = y$
 $y = 2x - 1$
 $17 = 2x - 1$
 $18 = 2x$
 $9 = x$
11. **D Category:** Multiple Figures
Difficulty: Medium
Strategic Advice: As with all multiple-figure questions, the key here is to pass information from one figure to the next. Bet that the radius of the circle will also be a dimension of another shape.
Getting to the Answer: Double the radius to get the diameter, which is also the hypotenuse of an isosceles right triangle. So the diameter is $6\sqrt{2}$. Because the ratio of the sides in an isosceles right triangle is $x : x : x\sqrt{2}$, each leg measures 6.

Because the leg of the triangle is also the side of the square, the perimeter of the square must be $4 \times 6 = 24$.

12. **C** **Category:** Averages: High Difficulty

Difficulty: High

Strategic Advice: Go in to Test Day knowing certain formulas, such as the average formula, cold. Also, keep your options in mind; this question can be managed algebraically or by Picking Numbers.

Getting to the Answer: Translate into algebra, manipulating the equation until all you have on one side is an expression that means “the average of a and b ”:

$$\frac{a + b + c}{3} = z$$

$$a + b + c = 3z$$

$$a + b = 3z - c$$

$$\frac{a + b}{2} = \frac{3z - c}{2}$$

13. **A** **Category:** Puzzles and Logic

Difficulty: Medium

Strategic Advice: When you see two groups of numbers that overlap, count the number of distinct terms (to avoid counting the shared terms twice) using the equation $G_1 + G_2 - B = T$, where G_1 and G_2 are the numbers of terms in each group, B is the number of terms common to both groups, and T is the total number of terms.

Getting to the Answer:

$$G_1 + G_2 - B = T$$

$$18 + 12 - B = 24$$

$$B = 6$$

14. **B** **Category:** Triangles

Difficulty: High

Strategic Advice: If all else fails, Eyeball—(A) is too small and (E) is too big.

Getting to the Answer: If each of the smaller triangles is equilateral and located within a larger equilateral triangle, all of the smaller triangles are equal in size. There are 25 such triangles, so each has area 3. Ten such triangles are shaded.

15. **A** **Category:** Factors and Multiples

Difficulty: High

Strategic Advice: Don't take questions, especially high-difficulty ones like this, at face value. Instead, ask, “What's really going on here?” What you'll see in this case is that what you face is not really so much a matter of coordinate geometry as of basic algebra and number properties.

Getting to the Answer:

$$3x + 6y = 29$$

$$3(x + 2y) = 29$$

$$x + 2y = \frac{29}{3}$$

You're given that x and y are integers. $2y$ must then also be an integer. Could two integers ever sum to a noninteger? No.

16. **C** **Category:** Expressions
Difficulty: High
Strategic Advice: As you absorb the explanation below, notice how often the SAT uses scary-looking word choice to mask what is actually a very straightforward question. The upshot is to train yourself to see the simple question behind the scary-looking one.
Getting to the Answer: Jon's d inches, when reduced by $\frac{1}{3}$, is Ali's height in inches. Ali's height must then be $\frac{2}{3}$ of Jon's.
17. **C** **Category:** Scatterplots and Matrices
Difficulty: Medium
Strategic Advice: The cost per ounce of each brand is the slope of a line passing through that brand and the origin of the graph. The point that lies on the line with the lowest slope will cost the least per ounce. This lets you immediately rule out A , B , and D . It's hard to see whether C or E is smaller, so you can just calculate the cost per ounce of each of those brands to see which one is least.
Getting to the Answer:
 $C: \frac{\$1.25}{10} = \0.125 per ounce
 $E: \frac{\$2.00}{14} \cong \0.14 per ounce
 So brand C costs the least per ounce.
18. **B** **Category:** Positives and Negatives
Difficulty: Medium
Strategic Advice: There's almost always more than one way to get to the answer, even with tough questions such as this. As an alternative to the explanation below, remember that you could always Backsolve here.
Getting to the Answer: If you want a particular integer in a set minimized, maximize the other integers in the set. You might think of -9 as the minimum if the other values were -1 , -1 , and -1 . But remember that the integers must be different. The next best thing you can do is make the maximized integers -1 , -2 , and -3 , leaving -6 for the minimum.
19. **E** **Category:** Solid Geometry
Difficulty: High
Strategic Advice: Word problems challenge many test takers, perhaps because they're really about English before they're about math. As you read the English, ask yourself, "What does this mean in math?"
Getting to the Answer: Translate: "the sum of the height of the luggage and the perimeter of the base of the luggage must be less than or equal to 124 inches" means that if the luggage has height h , length ℓ , and width w , then $h + 2(\ell + w) \leq 124$. Now follow through with substitution:
 $40 + 2(\ell + 18) \leq 124$
 $40 + 2\ell + 36 \leq 124$
 $2\ell \leq 48$
 $\ell \leq 24$

20. **B Category:** Multiple Figures

Difficulty: High

Strategic Advice: This question, drawn from the 2005 SAT's new topic of "geometric probability," does a great job of highlighting the crucial idea that often, especially with the toughest, most complex questions, your best bet is to begin by identifying what you want, and then reasoning backwards, step by step, until you arrive at a clear, easy first step. In this case, you're asked for a probability that

essentially boils down to the value of this fraction: $\frac{\text{area}_{\text{shaded}}}{\text{area}_{\text{whole}}}$.

You could get the shaded area if you knew the area of the smaller circle.

You could get the area of the smaller circle if you knew the area of the square.

You could get the area of the square if you knew the area of the larger circle.

So begin there, and follow this chain: 1. larger circle to 2. square to 3. smaller circle to 4. shaded area to 5. answer.

Getting to the Answer: Larger circle: Call its radius r . Then its area is πr^2 . Square: Its diagonal is $2r$ —the diameter of the larger circle. Its side is therefore $r\sqrt{2}$ (because, in a square, the side multiplied by $\sqrt{2}$ equals the diagonal) and its area is then $2r^2$. Smaller circle: The side of the square— $r\sqrt{2}$ —is also the diameter of the smaller circle, which means that the radius of the smaller circle is $\frac{r\sqrt{2}}{2}$, and the

area of the smaller circle is $\pi\left(\frac{r\sqrt{2}}{2}\right)^2$, or $\frac{2\pi r^2}{4}$, which simplifies to $\frac{\pi r^2}{2}$. The shaded

area is the area of the square minus the area of the smaller circle, or $2r^2 - \frac{\pi r^2}{2}$,

which can be simplified: $\frac{4r^2}{2} - \frac{\pi r^2}{2} = \frac{4r^2 - \pi r^2}{2} = \frac{r^2(4 - \pi)}{2}$. Finally, the answer is this

fraction, on top of the entire area of the figure, which you saw was πr^2 : $\frac{\frac{r^2(4 - \pi)}{2}}{\pi r^2} =$

$\frac{r^2(4 - \pi)}{2} \times \frac{1}{\pi r^2} = \frac{4 - \pi}{2\pi}$. If you found this harrowing, review it once or twice before

deciding it's not for you; you may find that it makes sense in time. In the end, though, keep in mind that this question is also the perfect candidate for Kaplan's strategy of Picking Numbers. To see for yourself, simply assign a value to r (4 or some other smallish even number would be good) and retrace the steps you just went through. You'll find yourself at the answer quickly and easily. Remember that even with the toughest questions, there's almost always more than one road to the answer.

Section 3 (Experimental)

1. **B Category:** Coordinate Geometry: Low and Medium Difficulty
Difficulty: Low
Strategic Advice: The equation for a line ($y = mx + b$) is the key to answering questions about lines on the SAT. In this equation, x and y are any point (x, y) on the line, and m is the slope.
Getting to the Answer: You're looking for the y -intercept, which is b in the equation for a line. You're given the point $(4, -2)$, so you can plug $x = 4$ and $y = -2$ in to the equation. You're also given the slope, so you can plug in 5 for m .
 $y = mx + b$ becomes
 $-2 = 5(4) + b$
 $-2 = 20 + b$
 $-22 = b$. So, the y -coordinate of the line is -22 , (B).

2. **A Category:** Sequences
Difficulty: Low
Strategic Advice: Since this is a low-difficulty question, the difference between each number in the sequence should be straightforward.
Getting to the Answer: To find the value of d in the sequence, you have to figure out what's being done to each number in the sequence to get the next number. Ask yourself, "How can I get from 4 to 20?" You can either add 16, or multiply by 5. How can you get from 20 to 100? You can either add 80, or multiply by 5. So, each number is multiplied by 5 to get the next number. 100 times 5 is d , so $d = 500$. Just to check, multiply d by 5 to see if you get the next number. 500 times 5 = 2500, so it works!

3. **E Category:** Expressions
Difficulty: Low
Strategic Advice: Whenever you see a problem with lots of addition and multiplication, remember the order of operations.
Getting to the Answer: The order of operations is Parentheses, Exponents, Multiplication, Division, Addition, and Subtraction (PEMDAS). So, first do the terms in parentheses
 $2 \times 10^4 = 20,000$. $5 \times 10^3 = 5,000$. $6 \times 10^2 = 600$.
 $4 \times 10^1 = 40$.
Then, add them. $20,000 + 5,000 + 600 + 40 = 25,640$.

4. **A Category:** Coordinate Geometry
Difficulty: Low
Strategic Advice: To find how much greater one line segment is than another, you have to find their lengths and subtract.
Getting to the Answer: Y is at 3 on the number line and Z is at 8, so the length of \overline{YZ} is $8 - 3 = 5$. X is at 1 on the number line and Y is at 3, so the length of \overline{XY} is $3 - 1 = 2$. So the length of \overline{YZ} is $5 - 2 = 3$ greater than the length of \overline{XY} .

5. **B Category:** Exponents: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: To find the value of x , you need to change 16 into a power of 2
Getting to the Answer: $16 = 2^4$. Therefore,
 $2^{x+1} = 16 = 2^4$. When the bases are the same, you can set the exponents equal to each other—so,
 $x + 1 = 4$
 $x = 3$

6. **E Category:** Lines and Angles
Difficulty: Medium
Strategic Advice: There are 360 degrees around a point.
Getting to the Answer: To find a , add up the degree measures that you're given, set them equal to 360, and solve for a :

$$90 + 30 + 2a + 30 + a = 360$$

$$150 + 3a = 360$$

$$3a = 210$$

$$a = 70$$
7. **B Category:** Factors and Multiples
Difficulty: Medium
Strategic Advice: Questions with variables in the question stem and in the answer choices will sound a lot less confusing if you Pick Numbers.
Getting to the Answer: To find the next multiple of 3, simply add 3 to the expression: $x - 1 + 3 = x + 2$, (B). If this is unclear, pick a number for x . If $x = 4$, $4 - 1 = 3$; the next greatest multiple of 3 is 6. Plugging 4 for x into each answer choice, you'll find that only (B) gives you 6.
8. **B Category:** Averages: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: Remember the Average Formula: Number of Terms \times Average = Sum of Terms.
Getting to the Answer: For the first group, $3 \times 40 = 120$, so the sum of 20, 70, and x is 120. For the second group, $4 \times 50 = 200$, so $20 + 70 + x + y = 200$. Since the sum of the first three terms is 120, $120 + y = 200$, and $y = 80$.
9. **D Category:** Percents: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: Pick 100 to simplify confusing percents problems.
Getting to the Answer: Since you're dealing with percents, let $r = 100$. 40% of $r = s$, so 40% of $100 = 40 = s$. You're asked which answer choice is equal to 10% of r , 10% of $100 = 10$. Now plug the value for s into the answer choices to see which ones give you 10:
 (A) $4s = 4 \times 40 = 160$. Eliminate.
 (B) $2s = 2 \times 40 = 80$. Eliminate.
 (C) $\left(\frac{s}{2}\right) = \left(\frac{40}{2}\right) = 20$. Eliminate.
 (D) $\left(\frac{s}{4}\right) = \left(\frac{40}{4}\right) = 10$. Works!
 (E) $\left(\frac{s}{8}\right) = \left(\frac{40}{8}\right) = 5$. Eliminate.
 Since (D) is the only choice that produces the desired result, it is the correct answer. But remember, when Picking Numbers you need to check all the answer choices; if more than one works, pick new numbers and plug them in until only one answer choice works.
10. **C Category:** Primes
Difficulty: Medium
Strategic Advice: Don't be intimidated when the SAT introduces terms you're not familiar with. They'll always be defined in the question stem.

Getting to the Answer: Check the answer choices. If a number has even one factor (not including 1 and itself) that is not a prime number, eliminate that choice:

- (A) 12: 4 is not prime. Eliminate.
- (B) 18: 6 is not prime. Eliminate.
- (C) 21: 3 and 7 are its only other factors, and both are prime. Correct!
- (D) 24: 6 is not prime. Eliminate.
- (E) 28: 4 is not prime. Eliminate.

11. **A** **Category:** Transformations and Qualitative Behavior

Difficulty: Medium

Strategic Advice: If you're not sure how common transformations work, try plugging in points from the graph.

Getting to the Answer: The graph of $w(x - 3)$ should be the graph of $w(x)$ shifted three units to the right. For instance, $w(-3) = 0$, so $w(0 - 3) = 0$. (A) is $w(x)$ shifted three units to the right.

12. **E** **Category:** Equations and Unknowns

Difficulty: Medium

Strategic Advice: The easiest way to solve this problem is to Pick Numbers.

Getting to the Answer: Try different possible values for x and y , eliminating the incorrect answer choices. Since x is multiplied by 3, let's begin with the smallest positive integer value for x :

1. If $3(1) + y = 14$, then $y = 11$, and $x + y = 12$. So (A) is out.

If $3(2) + y = 14$, then $y = 8$, and $x + y = 10$. So choice (B) is out. If $3(3) + y = 14$, then $y = 5$, and $x + y = 8$. So (C) is also out. You might notice at this point that (E) is impossible (which makes it the right choice). After all, the next smallest possible value of x is 4, and since x and y must both be positive integers, neither one can equal 0. (Zero is not positive—or negative.) So the sum of x and y must be greater than 4. (Sure enough, if $x = 4$, then $y = 2$, and $x + y = 6$, eliminating (D) as well.)

13. **B** **Category:** Rational Equations

Difficulty: Medium

Strategic Advice: The equation in this question is complex enough that you may prefer to Backsolve instead of solving the problem algebraically. Use whichever method is more comfortable for you.

Getting to the Answer:

$$\frac{q+7}{4} + \frac{2q}{7} = 5$$

$$\frac{7q+49}{28} = \frac{q+3}{2}$$

$$\frac{7q+49+8q}{28} = \frac{10+q-7}{2}$$

$$\frac{15q+49}{28} = \frac{q+3}{2}$$

$$15q+49 = 14q+42$$

$$q+7 = 0$$

$$q = -7$$

14. **C** **Category:** Expressions

Difficulty: Medium

Strategic Advice: Whenever you're translating from English to Math, think carefully about what each sentence means. Picking Numbers can help you figure out particularly complicated sentences.

Getting to the Answer: When the r cards are distributed, there are 8 left over, so the number of cards distributed is $r - 8$. Divide the number of cards distributed by the number of people.

Since there are s people, each person gets $\frac{r-8}{s}$ cards. Another approach is to

Pick Numbers. Let $r = 58$ and $s = 10$; if $58 - 8$ or 50 cards were distributed evenly among 10 people, each would receive 5 cards. Plug the values you picked for r and s into the answer choices to see which ones give you 5:

- (A) $\frac{s}{8-r} = \frac{10}{8-58} = -\frac{1}{5}$. Eliminate.
- (B) $\frac{r-s}{8} = \frac{58-10}{8} = 6$. Eliminate.
- (C) $\frac{r-8}{s} = \frac{58-8}{10} = 5$. Works!
- (D) $s - 8r = 10 - (8 \times 58) = -454$. Eliminate.
- (E) $rs - 8 = (58 \times 10) - 8 = 572$. Eliminate.

Since (C) is the only answer choice that gives you 5, it is the correct answer. But be sure to check all the answer choices when Picking Numbers.

15. **D** **Category:** Factors and Multiples

Difficulty: Medium

Strategic Advice: Picking Numbers works well here, but be careful—since the question asks which answer choice CANNOT be an integer, you may have to pick a few numbers for each choice before you find one that proves it *can* be an integer.

Getting to the Answer: Check each answer choice to see which doesn't work:

- (A) If d is an even integer, say 2, then $\frac{d}{2} = \frac{2}{2} = 1$ is an integer. Eliminate.
- (B) If d is a perfect square with an even square root, say $d = 4$, then $\frac{\sqrt{4}}{2} = \frac{2}{2} = 1$ is an integer. Eliminate.
- (C) This will always produce an even integer; if $d = 3$, $2d = 2 \times 3 = 6$ is an integer. Eliminate.
- (D) $d\sqrt{2}$ CANNOT produce an integer. An integer would result if $\sqrt{2}$ is multiplied by another multiple of $\sqrt{2}$, which is impossible because d must be an integer. So (D) is correct.

Let's check (E) just to make sure.

- (E) This will always produce an integer; if $d = 5$, $d + 2 = 5 + 2 = 7$ is an integer. Eliminate.

16. **A** **Category:** Triangles
Difficulty: Medium
Strategic Advice: The area of a triangle = $\frac{1}{2}$ (base \times height).
Getting to the Answer: Since the area of $\triangle ABC$ is 6,
 $\frac{1}{2}(AB \times BC) = 6$. If you consider CD as the base of $\triangle ACD$, you will notice that its height is represented by altitude AB . So the area of $\triangle ACD = \frac{1}{2}(CD \times AB)$. Since $CD = BC$, the area of $\triangle ACD$ can be expressed as $\frac{1}{2}(BC \times AB)$, which equals 6.
17. **C** **Category:** Ratios: High Difficulty
Difficulty: High
Strategic Advice: Once you know one number in a ratio, you can find the rest.
Getting to the Answer: Since the ratio of x to y to z is 3:6:8, if $y = 24$ or 4×6 , x and z must also be multiplied by 4 for the ratio to hold. So $x = 4 \times 3 = 12$ and $z = 4 \times 8 = 32$, and $x + z = 44$.
18. **D** **Category:** Equations and Unknowns
Difficulty: High
Strategic Advice: Since this question asks about an expression, look for a shortcut—how could you find $x + y + z$ without solving for x , y , and z individually?
Getting to the Answer: If you add the 3 equations together, you find that $2x + 2y + 2z = 38$; dividing both sides by 2 shows that $x + y + z = 19$, (D).
19. **C** **Category:** Advanced Equations
Difficulty: High
Strategic Advice: Always read the question carefully. Here, what does the fact that $r < 0$ tell you about the answer choices?
Getting to the Answer: $(4r - 4)^2 = 36$, so $4r - 4$ could equal 6 or -6 , since the result is 36 when each of these integers is squared. But the problem states that $r < 0$, so try -6 . $4r - 4 = -6$, $4r = -2$, and $r = -\frac{2}{4} = -\frac{1}{2}$, (C). (If you try $4r - 4 = 6$ you'll find $r = 2\frac{1}{2}$, which cannot be correct for this question since $r < 0$.)
20. **B** **Category:** Solid Geometry
Difficulty: High
Strategic Advice: The surface area of a cube is the sum of the area of all its faces. Since each face of a cube is e^2 , where e is the length of an edge of the cube, and a cube has 6 identical faces, the surface area of a cube is $6e^2$.
Getting to the Answer: Since the surface area is $36n^2$:

$$6e^2 = 36n^2$$

$$e^2 = 6n^2$$

$$e = n\sqrt{6}$$
 The volume of a cube is e^3 . To solve for the volume in terms of n , plug in the value for an edge that you just found: Volume = $e^3 = (n\sqrt{6})^3 = 6n^3\sqrt{6}$, (B).

Section 4 (Critical Reading)

1. **A** **Category:** Two-Blank
Difficulty: Low
Strategic Advice: Don't forget to consider Word Charge.
Getting to the Answer: Because *city inhabitants* are *pleased*, we know that the word that fills the second blank must be positive. And *while* tells you that the meaning of the phrase before the comma will contrast with that of the clause that comes after it. Since the word in the second blank is positive, the word in the first blank must be negative.
(A) This works. *Skepticism*, meaning a doubtful state of mind, is appropriately negative, while *vital* is positive.
(B) The first word here is not negative enough.
(C) *Doubt* works well, but an *unnecessary* subway system would not please residents.
(D) These words don't provide the contrast you need.
(E) An *untimely* subway system would not please city inhabitants.

2. **A** **Category:** One-Blank
Difficulty: Low
Strategic Advice: Look for clues that suggest a straight definition.
Getting to the Answer: If the instructor is teaching a new rider, that rider will want a horse that is *easy to ride*. Look for a match for this concept.
(A) This matches nicely.
(B) This is the opposite of what you want.
(C) The size of the horse is not necessarily related to the ease or difficulty with which a horse can be ridden.
(D) This is the opposite of the prediction.
(E) Horses may stop *abruptly*, but they themselves are not abrupt, nor does this fit the prediction.

3. **B** **Category:** Two-Blank
Difficulty: Medium
Strategic Advice: Choose whichever blank seems easier for you to work with.
Getting to the Answer: The clue here is *critics of censorship laws*. The rest of the sentence talks about *freedom of expression* and *art and literature*, things about which a critic of censorship would have positive feelings. Begin with the second blank rather than the first, because there you have another clue: the second blank is followed by *or controlled*. This means that the second blank is probably similar in meaning to *controlled*.
(A) The second blank doesn't work with your prediction.
(B) Correct. The second blank does work here, and *maximize* has the positive charge you need.
(C) While the second blank works, the first has the wrong charge.
(D) The second blank doesn't match the prediction.
(E) The second blank disqualifies this one as well.

4. **D** **Category:** One-Blank
Difficulty: Medium
Strategic Advice: Get to know words and phrases that signal a definition.

Getting to the Answer: *Is so ----- that* indicates that a definition is coming. The legislation has divided Congress into opposing camps, so the new bill must be something that sparks argument, or is *divisive*.

(A) This clearly doesn't match the prediction.

(B) *Vexatious* means "annoying," which has an appropriately negative charge, but does not specifically indicate anything regarding an argument.

(C) *Dismaying* describes something that causes one to lose enthusiasm, not to engage in a dispute.

(D) This matches the prediction nicely.

(E) This has the wrong charge. Even if you didn't know the word's meaning, you could still deduce that it lacked a negative charge.

5. **D** **Category:** Two-Blank

Difficulty: Medium

Strategic Advice: Don't let long sentences intimidate you; that usually means there are more clues to work with.

Getting to the Answer: *Though* indicates a contrast between the *majority of workers who are in fact regular smokers* and a few workers whose protests brought about the smoking ban. If that doesn't leave just one answer, work on the second blank. If you instituted a rule that protesters wanted, what effect would that have? It should *satisfy* them.

(A) The first blank works, but the second is opposite.

(B) The protesters, at least, should be happy, so you couldn't characterize the responses as uniformly *negative*.

(C) Conversely, you cannot paint all responses as *positive*, disqualifying this choice as well.

(D) Correct. The first blank works, as does the second.

(E) With the division the sentence implies, you know the responses were not unanimous.

vociferous: marked by noisy outcry

satiate: to satisfy fully

6. **B** **Category:** Two-Blank

Difficulty: Medium

Strategic Advice: Work with whichever blank seems easier to you.

Getting to the Answer: The reviewer found the novel's plot *implausible*, or difficult to believe. The first blank, then, will contain a negatively charged verb, and the second blank should also be negatively charged.

(A) Both of these words are positive, so this choice can't work.

(B) Correct; both of these words carry a negative charge. You can check the other choices to be sure.

(C) The first word is good, but *fictional* is neutral in charge.

(D) The first word is too neutral.

(E) The first word is too neutral, and the second word is not justified by the context.

mundane: commonplace; ordinary

depraved: morally corrupt

7. **A** **Category:** One-Blank
Difficulty: High
Strategic Advice: Be careful with multiple contrasts; make sure you find the right word with which to form a contrast.
Getting to the Answer: The stem contrasts the buildings with the subway stations in two ways. Overall, the *modern* subway stations are contrasted with *Colonial-era* buildings in the *old* part of town. But you need a word to contrast with *graceful curves*. You can predict that the subway stations are not curved, but *square* or *boxy*.
(A) This gives a good match. If you didn't know this word, its similarity to *rectangle* and *linear* should have helped you.
(B) This doesn't contrast with *graceful curves*.
(C) This word doesn't make sense as a contrast.
(D) This doesn't give you the contrast you need.
(E) This may seem close, but doesn't get at the shape or design of the stations in the way you need.
8. **E** **Category:** One-Blank
Difficulty: High
Strategic Advice: A word at the end of a sentence—and a logical sequence—must have a strong relationship with all that has come before it
Getting to the Answer: The missing word has to be similar in tone and meaning to both *complete* and *universal*.
(A) This word is unrelated to the prior two terms.
(B) This word is positively charged, but its meaning lacks a strong relationship to the other two.
(C) You may not know this word, so you should at least skip it and look for a better match. But notice the similarity to *heterogeneous*; something of that general meaning would not seem to make sense here.
(D) This is opposite to what you want.
(E) This is the answer. It fits in with the meaning of the two Keywords.
heterodox: not in agreement with established beliefs
9. **B** **Category:** Function
Difficulty: Medium
Strategic Advice: Read around the reference to determine how the author is using it.
Getting to the Answer: The first two sentences set up a contrast. On one hand, “many Americans know hula ... only from tourism and television programs.” On the other, “to Hawaiians ...hula is a powerful symbol of identity and pride.” You know, therefore, that the author believes that most Americans have little knowledge of or connection to hula.
(A) Out of Scope; the passage says nothing about this subject.
(B) This is a great match for your prediction.
(C) Distortion; this choice twists lines 5–7: “using the dance as their medium, ancient Hawaiians passed their legends to younger generations.”
(D) Opposite; the paragraph suggests that this is not true.
(E) Distortion; travel and tourism have no relationship to “American missionaries who arrived in 1821.”

10. **D** **Category:** Inference
Difficulty: Low
Strategic Advice: With a broadly phrased question, you need to pull some information from different parts of the passage to answer correctly.
Getting to the Answer: Earlier in the passage, the author notes that Hawaiians regard hula as a powerful symbol of identity and pride. In the last sentence, he says that hula was “restored to its rightful place.” This indicates that he disagrees with the missionaries who banned it.
 (A) Distortion; this is what the American missionaries thought of hula, not the author.
 (B) Distortion; the information in the first sentence states that Americans know hula from TV and from visiting Hawaii. The author, however, says that hula is more than this—it’s a symbol of cultural identity and pride.
 (C) Distortion; the passage says that hula was “restored” during the king’s reign. If it was restored, then it must have existed prior to his reign and could not have originated during it.
 (D) This matches the prediction well.
 (E) Distortion; the passage says that hula was the medium *by which* Hawaiians passed their legends down to succeeding generations.
11. **D** **Category:** Function
Difficulty: Low
Strategic Advice: To establish the context of the phrase, refer to the paragraph and read the sentence before and after the phrase.
Getting to the Answer: The author’s tone is helpful. He loves to read, so the phrase establishes the physical trembling as a manifestation of *his love of books*.
 (A) Out of Scope; the author never refers to a *disease*.
 (B) Out of Scope; nothing indicates that the author’s love of reading is transient.
 (C) Opposite; the author loved reading.
 (D) This matches the prediction nicely.
 (E) Distortion; the author never indicates that reading was just a hobby for him, although his mother did wonder whether that was the case.
12. **C** **Category:** Detail
Difficulty: Medium
Strategic Advice: Read around the referenced lines to sum up the mother’s feelings.
Getting to the Answer: The author’s mother was perplexed, as her question demonstrates. Look for a match with *frustration*.
 (A) Out of Scope; veneration is profound reverence. The mother never shows whether or not she admires the author’s reading habits.
 (B) Distortion; this is intense dislike, and the mother never demonstrates such dislike.
 (C) Correct. This captures the mother’s uncertainty or confusion over the author’s reasons for reading so much.
 (D) Distortion; this might tempt test takers who read the question stem too quickly and supply the author’s, not the mother’s, attitude.
 (E) Extreme; this is too harsh to describe the mother’s attitude.

Portraits

This passage discusses the frequent disconnect between a person's actual appearance and their likeness in a portrait. The first paragraph offers some background on the phenomenon, contrasting the quest for realistic portrayal with the need to interpret what is painted. The second paragraph discusses a historical need for the painter to flatter the subject, who may have been the one paying for the portrait to be done. The third paragraph details the political and social significance acquired by portraits beginning in the sixteenth century. The fourth paragraph offers the example of Antonio Moro and changes he brought to the painting of portraits. The final paragraph discusses the differences in relation to self-portraits.

13. **D** **Category:** Global
Difficulty: Medium
Strategic Advice: Pull back to focus on the passage taken as a whole.
Getting to the Answer: You should always predict a purpose for every passage, because a question like this will pop up on most passages. You should predict something like *discuss different aspects of painting portraits*.
(A) Distortion; this is too broad. The author looks at more than just the *history* of this art.
(B) Distortion; *self-portraiture* is not a major thrust of the passage and is only addressed at the end.
(C) Misused Detail; only Moro is discussed in any detail.
(D) This matches the prediction nicely.
(E) Distortion; this draws primarily from the third paragraph.
14. **B** **Category:** Vocab-in-Context
Difficulty: Medium
Strategic Advice: Making predictions are key here, to avoid trap answers.
Getting to the Answer: This word is less common, but reading for context will help. The sentence compares the need to “render...accurately” and the “desire to...interpret.” Predict something like *capture* or *reproduce*.
(A) This is a meaning of the word that doesn't fit here.
(B) This matches the prediction very well.
(C) This is another meaning of the word that doesn't fit.
(D) This is a less common meaning of the word, but it still doesn't make sense.
(E) This is one more alternate meaning that doesn't work. Reading it back into the sentence can confirm this fact.
15. **A** **Category:** Detail
Difficulty: Medium
Strategic Advice: Return to the cited lines to gain information to make a prediction.
Getting to the Answer: The first paragraph mentions that portraits are “always interpretive.” Use this as your prediction in looking for a match.
(A) This matches well. Check the others if necessary to confirm it.
(B) Extreme; the author says that portraits have degrees of subjectivity and objectivity. Therefore, they are not *entirely subjective*.
(C) Misused Detail; this doesn't address the question.
(D) Misused Detail; this also doesn't answer the question.
(E) Distortion; the author says that two realist portrait painters tend to produce different portraits of the same sitter, not that they're *incapable of* producing similar portraits.

16. **E** **Category:** Detail
Difficulty: Medium
Strategic Advice: Read around the reference. The answer will be right there in the passage.
Getting to the Answer: The author states that rulers felt that portraits could “increase their power and reach.” Use this as your prediction.
 (A) Out of Scope; the author doesn’t mention this.
 (B) Distortion; the passage focuses more on the elite, not *everyday people*.
 (C) Distortion; the author mentions the involvement of portraits in marriage proposals, not *weddings*.
 (D) Distortion; the author never specifically says this.
 (E) This matches the prediction very well.
17. **D** **Category:** Detail
Difficulty: Medium
Strategic Advice: Look for a detail in the surrounding text that supports the quote.
Getting to the Answer: The paragraph stresses the political aspect of the portraits, so look for something in that context.
 (A) Opposite; the passage suggests that artists were constrained, not liberated.
 (B) Distortion; while portrait artists were mostly *subservient* to their patrons, that is not the emphasis of this reference.
 (C) Out of Scope; the author does not discuss this.
 (D) This fits well and is the answer.
 (E) Misused Detail; while the passage mentions the Church’s lessened influence, it provides no basis for concluding that the portraits themselves produced this lessening.
18. **E** **Category:** Detail
Difficulty: High
Strategic Advice: Be careful to focus on the one answer that is NOT in the paragraph.
Getting to the Answer: With such a long paragraph, skim the choices, then go through the paragraph, crossing off the four that you find there.
 (A) Opposite; you can find this in lines 42–45.
 (B) Opposite; you can find this in lines 49–50.
 (C) Opposite; you can find this in lines 46–48.
 (D) Opposite; you can find this in lines 55–57.
 (E) Correct; this is not mentioned.
19. **A** **Category:** Inference
Difficulty: High
Strategic Advice: Depending on your comfort level with the material, select a choice and read back through the paragraph to confirm. Otherwise, skim the paragraph again to firm it up in your mind.
Getting to the Answer: If you can’t make a specific prediction, which is difficult here, at least focus on the tone. The author speaks at great length about Moro, and he does so positively for the most part.
 (A) This works. Note the author’s statement that Moro’s “artistic innovations ... were used again and again” by later painters.
 (B) Out of Scope; you don’t know whether Moro produced *landscapes*.
 (C) Distortion; you read that Moro saw Titian’s work, but the passage doesn’t say

that he based his portrait on the former work.
(D) Extreme; the passage doesn't support this.
(E) Distortion; the author doesn't indicate this.

20. **B** **Category:** Detail
Difficulty: Medium
Strategic Advice: When you don't get a line reference, you do know that the reference you need is in the neighborhood of that for the question you just answered.
Getting to the Answer: Line 55 refers to Holbein's representation of the King's expression as "rather dry." This suggests stiffness and formality, as does the fact that King Henry is "rigidly positioned." In contrast, Rembrandt's portraits are considered "introspective" (line 81) and showed his "joyful youth" and "agonized old age" (lines 83–84). Predict something like *flexibility* versus *stiffness*.
(A) Out of Scope; you do not know Rembrandt's feelings about painting royalty.
(B) This matches very well.
(C) Distortion; this is not stated in the passage.
(D) Opposite; the prediction helps to recognize this.
(E) Out of Scope; these points are not discussed in the passage.
21. **C** **Category:** Detail
Difficulty: Low
Strategic Advice: Very short answers are perfect opportunities for making predictions.
Getting to the Answer: These lines contain a large number of adjectives describing the Duke, all of them negative, such as "shrewd" and "terrible." A specific prediction may not be necessary in this case; just look for two negative adjectives.
(A) Opposite; these are too positive.
(B) Opposite; these are too complimentary.
(C) These work. Each adjective is negative.
(D) Opposite; both are positive.
(E) Opposite; these aren't negative enough.
22. **B** **Category:** Function
Difficulty: Medium
Strategic Advice: Reread the paragraph if need be to help make a prediction.
Getting to the Answer: The paragraph introduces the new topic of self-portraiture, but note the last sentence: it says the artist "will always be subject to...feelings, even when he or she is the subject of the portrait." Predict something like *to show that self-portraiture is similar in certain ways to portraits of others*.
(A) Out of Scope; although the author does mention Rembrandt's having produced almost 80 self-portraits, this was not the author's purpose in bringing Rembrandt up.
(B) This matches the prediction very well.
(C) Out of Scope; the author does not discuss this.
(D) Out of Scope; the author does not mention this. Also, it's hard to *prove* anything in a relatively short piece of writing.
(E) Out of Scope; this is not stated.
23. **C** **Category:** Detail
Difficulty: Medium
Strategic Advice: Read around the reference closely. You should be able to put your finger on the answer.

Getting to the Answer: The line that the question refers to reads, “The difference is that in self-portraiture the artist is free from...restraints.” A good prediction, then, is an answer that speaks about freedom or lack of restraint.

(A) Opposite; the passage says it can be “just as distorted.”

(B) Opposite; the last paragraph mentions that the doubts that an artist has when doing a self-portrait are the same as he has when painting someone else.

(C) This matches the prediction nicely.

(D) Misused Detail; this refers back to paragraph 3, where the author says that the portraits of rulers were used to form alliances.

(E) Distortion; while the passage states that Rembrandt traced his life through self-portraiture, it doesn’t imply that a portrait artist couldn’t do the same thing for his sitter.

24. **B** **Category:** Vocab-in-Context

Difficulty: Medium

Strategic Advice: For best success with Vocab-in-Context questions, read for context and make a prediction before looking at the answer choices.

Getting to the Answer: After referring to “the body of nearly 80...self-portraits produced by Rembrandt,” the author describes that “body” as “comprehensive.” So he doesn’t emphasize the paintings’ individual significance so much as he does their impact as a *group* or *collection*—good predictions for the answer.

(A) Out of Scope; this is an alternate meaning of the word that doesn’t fit here.

(B) Correct; this matches one of the predictions exactly.

(C) Out of Scope; this is another meaning of “body” that doesn’t work in context.

(D) Distortion; while this may sound like it makes some sense, it doesn’t fully match the thrust of the sentence.

(E) Out of Scope; this is related to a common meaning of the word, but it doesn’t make sense in context.

Section 5 (Writing)

1. **A** **Category:** Correct as Written
Difficulty: Medium
Issues: modifiers, unnecessary passives, parallelism, wordiness
Strategic Advice: Expect to see between five and eight sentences without errors.
Getting to the Answer: This sentence is correct as written. In (B), it is children, not computer games, who are *Readily available and easy to operate*, and the sentence is unnecessarily in the passive voice. (C) fails to use parallel structure in items compared with *as well as*. In (D), the opening phrase incorrectly modifies *basic computer skills*. (E) is unnecessarily wordy.

2. **C** **Category:** Parallelism
Difficulty: Medium
Issues: none
Strategic Advice: Items in a series or list must be in parallel form.
Getting to the Answer: The first two items in the series (*beginning with his Red period, continuing through his Blue period*) are parallel; the third (*finishing with his period of Cubism*) is not. (C) corrects the error. (B), (D), and (E) all violate the rules of parallelism.

3. **E** **Category:** Comparisons
Difficulty: High
Issues: verb tense
Strategic Advice: Make sure comparisons are between logical items or ideas.
Getting to the Answer: The author wants to compare the rates of economic growth of three nations but, as written, she is comparing *Latvia and Lithuania to the economy of Estonia*. Both (D) and (E) correct the error, but the change in verb tense in (D) changes the meaning of the sentence. (B) compares the nations, not the economies, which also changes the sentence's meaning. (C) does not address the error.

4. **E** **Category:** Diction
Difficulty: High
Issues: none
Strategic Advice: Use “fewer” for items that are countable (“fewer coins”) and “less” for items that can't be counted (“less cash”).
Getting to the Answer: Since both *people* and *companies* are countable, both should be modified by “fewer.” (E) is the only choice that complies.

5. **A** **Category:** Correct as Written
Difficulty: Medium
Issues: pronoun agreement, idiom
Strategic Advice: “Correct as Written” sentences are historically missed by nearly half of all test takers. Use elimination if you don't immediately spot an error, but remember—there may not be one.
Getting to the Answer: This sentence is correct as written. (B), (C), and (E) use the singular pronoun *its* to refer to the plural noun *theories*. (D) fails to properly complete the idiom *less to do with...than with*.

6. **C** **Category:** Ambiguity/Passives
Difficulty: High
Issues: verb tense
Strategic Advice: Although pronouns like *it* are often used without antecedents in everyday speech, such usage will be incorrect on the SAT.
Getting to the Answer: Here, the pronoun *it* is used without an antecedent, and the selection is unnecessarily in the passive voice. (C) corrects both errors. (B) does not address either error. (D) introduces an inappropriate verb tense in context. (E) changes the meaning of the sentence by failing to state who made the proposal.
7. **D** **Category:** Parallelism
Difficulty: Medium
Issues: style problems
Strategic Advice: Comparative structures require parallel form.
Getting to the Answer: This comparison first uses the participle form *Hearing*, then switches to the infinitive *to be*. (D) puts both verbs into the infinitive. (B) is incorrect grammatical structure. (C) and (E) do not correct the parallelism issue.
8. **A** **Category:** Correct as Written
Difficulty: Medium
Issues: parallelism
Strategic Advice: When a sentence contains a comparison, first look for parallelism issues.
Getting to the Answer: This sentence correctly uses parallel forms (*a lion flattens, a cat does*) in a comparative structure. None of the other answer choices does so.
9. **C** **Category:** Idiom
Difficulty: High
Issues: diction, wordiness, verb tense
Strategic Advice: Some usages that are common in everyday speech will be incorrect on the SAT.
Getting to the Answer: *As to whether* is incorrect usage; in a sentence discussing alternative possibilities, “whether” by itself is correct. (C) makes the correction. The use of *never* in (B) changes the meaning of the sentence. (D) uses *if*, which is incorrect in a discussion of two possibilities. (E) is unnecessarily wordy and introduces an inconsistent verb tense.
10. **B** **Category:** Subject-Verb
Difficulty: Low
Issues: diction, style problems
Strategic Advice: A verb must agree with its subject noun, which may not be the noun closest to it in the sentence.
Getting to the Answer: Even though the plural nouns *citizens and conditions* are both closer to the verb *have led*, its subject is actually the singular *activism*. (B) corrects the agreement error. (C) does not address the error; additionally, it replaces *number* with *amount*, which is only correct for uncountable objects. (D) also uses *amount*. (E) is incorrect grammatical structure.

11. **D** **Category:** Verb Tenses
Difficulty: High
Issues: none
Strategic Advice: Make sure verb tenses accurately reflect the sequence of events in a sentence.
Getting to the Answer: The first part of this sentence takes place in the past (*participated in competitive sports*), so *are in college* should be *were in college*. (D) makes the change, and also makes the second part of the sentence more concise without changing its meaning. (B) and (E) put the second part of the sentence in the past tense, which is incorrect in context. (C) does not address the error.
12. **C** **Category:** Idiom
Difficulty: Low
Issues: verb tense
Strategic Advice: Some idioms require specific prepositions; “give in to” is one such idiom.
Getting to the Answer: *Give in* requires the preposition “to”; the error is in (C). (A) is correct idiomatic usage. (B) and (D) are appropriate verb tenses in context.
13. **D** **Category:** Eliminators
Difficulty: Low
Issues: adjective/adverb, transition words, idiom
Strategic Advice: Only adjectives can modify nouns and pronouns.
Getting to the Answer: Here, the adverb *usually* is used where the adjective *usual* would be correct; (D) contains the error. (A) properly uses an adverb to modify an adjective. (B) appropriately expresses the cause-and-effect relationship between the clauses. (C) is correct idiomatic usage.
14. **E** **Category:** Correct as Written
Difficulty: Medium
Issues: verb tense, idiom
Strategic Advice: Expect several sentences in this section to be correct as written.
Getting to the Answer: This sentence has no error. The verbs in (A) and (C) appropriately represent the sequence of events in the sentence; (B) and (D) are the correct prepositions in context.
15. **C** **Category:** Ambiguity
Difficulty: High
Issues: verb tense, idiom
Strategic Advice: Pronouns must have clear, unambiguous antecedents.
Getting to the Answer: Here, *they* is introduced with no antecedent; (C) contains the error. (A) and (B) are appropriate verb forms in context. (D) correctly uses *among* to discuss three groups of people (*office staff, teachers, parents*).
16. **C** **Category:** Subject-Verb
Difficulty: Low
Issues: idiom
Strategic Advice: The subject of a sentence may appear after its verb.
Getting to the Answer: The subject here is the plural *professors*, which requires the plural verb form “sit”; the error is in (C). (A) and (B) are appropriate prepositions in context. (D) properly uses *three* to modify the noun *deans*.

17. **C** **Category:** Subject–Verb
Difficulty: Medium
Issues: adjective/adverb
Strategic Advice: A compound subject requires a plural verb.
Getting to the Answer: The subject here is *houses...and...gardens* (*neighborhood* is the object of the preposition *of*), so (C) should be “are.” (A) and (B) properly use adverbs to modify a verb form and an adjective, respectively. (D) is an appropriate noun as part of a compound object (*to...tenacity and...work*).
18. **B** **Category:** Subject–Verb
Difficulty: Medium
Issues: verb tense, idiom
Strategic Advice: The subject of a verb will not always be the noun closest to it in the sentence.
Getting to the Answer: The subject of this sentence is the singular *crop*, so the verb in (B) should be the singular “is.” (A) appropriately uses a noun as the object of the preposition *of*. (C) is the correct verb form in context. (D) is an appropriate preposition in context.
19. **D** **Category:** Pronouns
Difficulty: Medium
Issues: transition words, idiom
Strategic Advice: Use the objective pronoun form after a preposition.
Getting to the Answer: In the prepositional phrase *to him or I*, *him* in (C) is in the proper form, but *I* is not. Since you wouldn’t say “award the prize to I,” “me” would be correct in (D). (A) correctly relates the first clause to the second. (B) is appropriate use of *whether* to relate two options.
20. **B** **Category:** Verb Tenses
Difficulty: High
Issues: subject–verb
Strategic Advice: Verb tenses in a sentence must accurately reflect the sequence of events.
Getting to the Answer: This sentence discusses something that will happen in the future, the verb in (B) should read “will have been.” (A) agrees with its plural subject *freshmen*. (C) is an appropriate noun in context. (D) is the proper verb form.
21. **E** **Category:** Correct as Written
Difficulty: Medium
Issues: idiom, subject–verb
Strategic Advice: Check answer choices methodically when you don’t spot an error; choose (E) if the sentence has no error.
Getting to the Answer: This sentence contains no error. (A) and (B) are correct idiomatic usage. (C) agrees with its compound (and therefore, plural) subject *judges and lawyers*. (D) is appropriate use of the infinitive.
22. **B** **Category:** Diction
Difficulty: Medium
Issues: subject–verb, transition words
Strategic Advice: Use “fewer” for things that are countable and “less” for things that are not.

Getting to the Answer: Since *cars* can be counted, “fewer,” not *less*, would be correct in (B). (A) agrees with its plural subject. (C) is appropriate use on *and*. (D) properly uses *less*, since *air pollution* cannot be counted.

23. **C** **Category:** Pronouns
Difficulty: Low
Issues: idiom, subject–verb, verb tense
Strategic Advice: Pronouns must agree in number with their antecedents.
Getting to the Answer: Here, the plural pronoun *they* is used to refer back to the singular noun *tourist*; the error is in (C). (A) is the proper preposition in context. (B) agrees with its singular subject. (D) is an appropriate verb tense in context.
24. **D** **Category:** Comparisons
Difficulty: High
Issues: adjective/adverb, transition words, comparative/superlative
Strategic Advice: Comparative structures must relate similar items.
Getting to the Answer: This sentence compares *the peak of Mt. Everest* to *any mountain*. Either mountains or peaks should be compared; the error is in (D). (A) is proper adjective use. (B) correctly relates the two clauses. (C) is correct use of the comparative, since only two items (*the peak of Mt. Everest* and *any mountain*) are compared.
25. **C** **Category:** Idiom
Difficulty: Medium
Issues: pronouns
Strategic Advice: When a conjunction phrase begins with *neither*, *nor* must also be used.
Getting to the Answer: Here, *neither* is incorrectly paired with *or*; (C) contains the error. Context tells us that *neither*, in (A), is correct. (B) is an appropriate preposition in context. (D) agrees with its singular antecedent *world*.
26. **D** **Category:** Idiom
Difficulty: High
Issues: verb tense, adjective/adverb
Strategic Advice: Use “between” when referring to two items; “among” is correct for any number more than two.
Getting to the Answer: Here, since *three skiers* are sharing the granola bar, “among” would be correct; the error is in (D). (A) and (C) are appropriate verb tenses in context. (B) is proper use of an adjective.
27. **E** **Category:** Correct as Written
Difficulty: Medium
Issues: verb tense, adjective/adverb, subject–verb, idiom, pronouns
Strategic Advice: Between five and eight sentences in the Writing sections will be correct as written.
Getting to the Answer: This sentence contains no error. (A) is appropriate verb usage. (B) uses an adjective to modify a noun. (C) agrees with its subject *you* and correctly uses *that* as a conjunction. In (D), *it* agrees with its singular antecedent *nausea*, and *is* agrees with its singular subject *it*.

28. **E** **Category:** Correct as Written
Difficulty: Medium
Issues: adjective/adverb, idiom, verb tense
Strategic Advice: Use methodical elimination to determine which sentences are correct as written.
Getting to the Answer: This sentence contains no error. (A) properly uses an adverb to modify the verb phrase *came on*. (B) and (D) are appropriate prepositions in context. (C) reflects consistent verb tense usage.
29. **A** **Category:** Subject-Verb
Difficulty: High
Issues: idiom, adjective/adverb, verb tense
Strategic Advice: Although *Everything* generally refers to more than one item, the word itself is grammatically singular.
Getting to the Answer: *Everything* takes the singular verb form; (A) contains the error. (B) appropriately relates the clauses; *it* agrees with its singular antecedent *film*, and *is* agrees with its singular subject *it*. (C) properly uses an adverb to modify an adjective. (D) is consistent verb tense usage.
30. **A** **Category:** Correct as Written
Difficulty: Medium
Issues: reading comprehension, style problems, verb tense
Strategic Advice: The test makers frequently use complex sentence structure to disguise sentences that are correct as written.
Getting to the Answer: This sentence is complex in structure, but it is grammatically correct. (B) misstates the meaning of the original sentence. (C) misuses the semicolon, which is only correct when used to combine two independent clauses. (D) incorrectly relates the contrasting ideas in the sentence. (E) improperly uses the present tense for something that occurred in the past.
31. **A** **Category:** Reading Comprehension
Difficulty: High
Issues: run-ons and fragments, style problems, verb tense
Strategic Advice: To combine short, choppy sentences without creating a run-on, get a sense of which ideas are important and which merely provide additional information.
Getting to the Answer: Piaget’s year and place of birth, in the context of the passage, are simply additional information. Where and what he studied are the important points here. (A) combines the three sentences clearly and concisely. (B) simply strings the three ideas into a run-on sentence without relating them. (C) misuses the semicolon, since the second and third clauses are not independent. (D) and (E) are awkwardly worded and introduce inconsistent verb tenses.
32. **E** **Category:** Pronouns
Difficulty: Low
Issues: style problems, verb tense, wordiness, relative pronouns
Strategic Advice: Pronouns must agree in number with their antecedent nouns.
Getting to the Answer: Here, the *environment* under discussion is that of the *creatures*; since this noun is plural, the appropriate possessive pronoun is “their.” (E) contains the revision. (A) is a misuse of the semicolon splice, since the first clause is not independent. (B) introduces an incorrect verb tense. (C) is

unnecessarily wordy. (D) uses the relative pronoun *who* in reference to *changes*; *who* should only be used when referring to people.

33. **C** **Category:** Reading Comprehension
Difficulty: Medium
Issues: none
Strategic Advice: Use context to help you determine the correct answers to reading comprehension questions.
Getting to the Answer: *There*, at the beginning of the sentence, is a good clue. It makes sense that this sentence would follow one that references a location. This would eliminate (B). It seems illogical to think that Piaget *applied his knowledge* either immediately after his birth or after his death, eliminating (A) and (E). Of the remaining two choices, the sentence fits best after sentence 6, (C). It forms a logical connection between Piaget's switch to the study of psychology and his eventual conclusion that environment impacted mental development.
34. **C** **Category:** Run-ons and Fragments
Difficulty: Medium
Issues: style problems
Strategic Advice: When a question stem asks you to combine sentences, consider their relationship.
Getting to the Answer: As written, sentence 9 is a fragment. Since it continues the idea of sentence 8, connecting the two sentences with a comma splice is the simplest way to correct the error. (C) is correct here. (B) misuses the semicolon splice. (D) combines, but does not relate, the two ideas. (E) eliminates the relationship between the two ideas.
35. **E** **Category:** Reading Comprehension
Difficulty: Medium
Issues: none
Strategic Advice: The final sentence in a paragraph should not introduce a topic not covered in the paragraph.
Getting to the Answer: (E) is the logical sentence to end the third paragraph, since it concerns the use of Piaget's studies after his death. Since the passage is about Piaget's work, introducing at the end either his wife and children, as (A) does, or others who studied the same things, as in (D), would be Out of Scope. The information in (B) would best be placed somewhere in the second paragraph. (C) is a rewording of some of the information in the first paragraph.

Section 6 (Math)

- B Category:** Equations and Unknowns
Difficulty: Low
Strategic Advice: Some questions—especially those that come early in a section—test not so much your ability to interpret a question or to think very cleverly, but your ability to be careful and precise in your calculations. Remember that when you get a question like this one on Test Day.
Getting to the Answer:

$$3a + b = 10$$

$$3a + (2a) = 10$$

$$5a = 10$$

$$a = 2$$
- D Category:** Rates
Difficulty: Medium
Strategic Advice: Sometimes simply pausing to think about a situation is better than jumping into calculations. Here, if a job requires 8 hours, $\frac{1}{8}$ of the job gets done in one hour, so in 3 hours, $\frac{3}{8}$ of the job gets done.
Getting to the Answer: To see this more algebraically, set up a proportion that reflects that 8 hours relates to the whole job in the same way that 3 hours relates to some of it:

$$\frac{8}{1} = \frac{3}{x}$$

$$8x = 3$$

$$x = \frac{3}{8}$$
- E Category:** Coordinate Geometry: Low and Medium Difficulty
Difficulty: Low
Strategic Advice: It's almost never a bad idea to begin a question by asking about some key part of it, "What does this mean?" Frequently, the answer to that question is tantamount to the answer to the question itself. In this case, ask yourself what it means that the line to be created cannot ever pass through the y -axis.
Getting to the Answer: If the line can never intersect the y -axis, it must be parallel to it. If the line must pass through $(-2, -3)$ as well, it must have an x -coordinate of -2 , which only (E) has.
- D Category:** Ratios: Low and Medium Difficulty
Difficulty: Low
Strategic Advice: Beginnings are crucial in SAT Math: Set this up carefully and it's almost hard to get it wrong—but set it up incorrectly and it's impossible to get it right.
Getting to the Answer:

$$\frac{12}{5} = \frac{60}{x}$$

$$12x = 300$$

$$x = 25$$

5. **A** **Category:** Triangles
Difficulty: Medium
Strategic Advice: Questions such as this one are your payoff on Test Day for having absorbed certain facts and rules during your preparation. In this case, you have easy points on your hands if you recognize that behind this question is the Triangle Inequality Theorem, which requires that for any triangle, the measure of any side must be less than the sum of, but greater than the difference between, the two other sides.
Getting to the Answer:
 $(11 - 7) < \text{B-to-F} < (11 + 7)$
 $4 < \text{B-to-F} < 18$

6. **E** **Category:** Evaluating Functions
Difficulty: Medium
Strategic Advice: Here's a question drawn from the 2005 SAT's new topics. Like many such topics, this one—the domain and range of functions—is very manageable once you become comfortable with a few definitions. The domain of a function is the set of numbers for which the function is defined. The range of a function is the set of numbers that constitute the values of the function.
Getting to the Answer: Regarding domain, ask, "For what values of x would $\frac{1}{1 - x^2}$ not be defined?" It wouldn't be defined if it had a value of zero:
 $1 - x^2 \neq 0$
 $1 \neq x^2$
 $\pm 1 \neq x$

You have enough information now to conclude that the answer must be (E)—notice that this is an EXCEPT question. Though you're finished, think about the range of this function for a moment, just for the sake of rounding out your knowledge of this newly testable topic. If the domain of a function is its "inputs" in the sense of the numbers for which it's applicable, the range of a function is, in a manner of speaking, its "outputs" in the sense of the values that can be produced by the function. Could $\frac{1}{1 - x^2}$ have a value of 5? Sure. 4? Yes. And so on with all the other choices.

7. **A** **Category:** Probability: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: Much SAT math involves manipulation of three-part formulas such as the average formula, the percent change formula, and several others—in this case, the probability formula. Knowing these formulas not only helps you score, but also makes Test Day easier and calmer by giving structure to questions that might otherwise seem complex and unwieldy.
Getting to the Answer: Probability equals desired outcomes over possible outcomes: $\frac{10}{40} = \frac{1}{4}$.
8. **D** **Category:** Factors and Multiples
Difficulty: Medium
Strategic Advice: Train yourself to decode the simple meaning behind the obscure wording that'll often accompany math questions. All you're really asked for here is

one multiple greater than a multiple of 3, 4, 9, and 12.

Getting to the Answer: Don't worry about the 3 and 4, because they're already "in" the 12—that is, whatever 12 divides into, 3 and 4 will automatically also divide into by virtue of being parts of 12. If n is a multiple of 9 and 12, it must be a multiple of 36, the least common multiple of 9 and 12. The next multiple beyond n is therefore $n + 36$.

9. **20** **Category:** Equations and Unknowns

Difficulty: Medium

Strategic Advice: Notice that you're asked for $5(a + b)$ —something you could find easily if you knew $a + b$. That's the key insight here: re-expressing the equation as the sum of $a + b$, and then remembering to simply quintuple that amount.

Getting to the Answer:

$$a + 3 = 7 - b$$

$$a + b = 4$$

$$5(a + b) = 5(4) = 20$$

10. **5 < XY < 9**

Category: Triangles

Difficulty: Medium

Strategic Advice: Some questions come down to whether you do or don't know a particular fact or rule. In this case, the rule in question is the Triangle Inequality Theorem, which holds that in any triangle, the length of any side must be less than the sum but greater than the difference of the two other sides.

Getting to the Answer:

$$(XY + YZ) < 18 \text{ (given)}$$

$$(XY + YZ) > 10 \text{ (Triangle Inequality Theorem)}$$

$$10 < XY + YZ < 18$$

$$\text{Since } XY = YZ, 10 < 2XY < 18, \text{ so } 5 < XY < 9.$$

11. **7** **Category:** Puzzles and Logic

Difficulty: Medium

Strategic Advice: Don't get lost in the mire of many boxes with numbers and letters. Focus on carving out a path—and there are several—that'll get you to z .

Getting to the Answer:

$$\text{Top row: } 9 + 5 + 6 + v = 21, \text{ so } v = 1.$$

$$\text{Far right column: } 1 + 11 + 2 + z = 21, \text{ so } z = 7.$$

12. **135**

Category: Lines and Angles

Difficulty: Medium

Strategic Advice: On Test Day, expect many geometry questions to work as a sort of chain reaction in which one discovery leads to another and to another. The key is to latch on to a good initial discovery—such as the fact that $\angle ABC$ is right.

Getting to the Answer:

$$\angle ABC = 90^\circ$$

Line ℓ bisects $\angle ABC$.

$$\text{Therefore } t^\circ + 45^\circ = 180^\circ$$

$$t = 135.$$

13. **200**

Category: Factors and Multiples

Difficulty: Medium

Strategic Advice: Here you see another example of two-stepping: breaking an otherwise tricky question down into two painless steps. First determine the volume of water; then determine how many 3-ounce containers would hold it.

Getting to the Answer: Volume of water is $120 \text{ containers} \times 5 \text{ ounces each} = 600 \text{ ounces}$.

$600 \text{ ounces} \div 3\text{-ounce containers} = 200 \text{ containers}$.

14. **5** **Category:** Advanced Equations

Difficulty: High

Strategic Advice: A perennial favorite on the SAT, questions like this one scare most students. If you remember that such questions almost always work the same way, you'll not only manage stress on Test Day, but also use questions such as this to rack up points.

Getting to the Answer:

Use $x = -1$ to find c :

$$x^2 - 4x - c = 0$$

$$(-1)^2 - 4(-1) - c = 0$$

$$1 + 4 - c = 0$$

$$5 = c$$

Now just solve the quadratic:

$$x^2 - 4x - 5 = 0$$

$$(x - 5)(x + 1) = 0$$

$$x - 5 = 0 \text{ or } x + 1 = 0$$

$$x = 5 \text{ or } x = -1$$

Eliminate $x = -1$, because this value was given in the question stem, where you were asked for the other root.

15. **1017**

Category: Odds and Evens

Difficulty: Medium

Strategic Advice: Especially on harder SAT questions, a little time invested in clever thinking will get you farther, faster, than jumping into equations right away—this question is no exception to that principle. Imagine that the 3,045 were simply split evenly three ways. Each part would then be 1,015, right? From this realization, it's just a simple adjustment to determine the three consecutive odd integers in question.

Getting to the Answer:

$$1,015 + 1,015 + 1,015 = 3,045$$

$$1,013 + 1,015 + 1,017 = 3,045$$

Or, consider the algebraic solution. How can you make sure that a certain integer is odd? Describe it as $2x + 1$ —because such a number is one more than $2x$ (which must be even), it must be odd. So:

$$2x + 1 = \text{first consecutive odd integer}$$

$$2x + 3 = \text{second consecutive odd integer}$$

$$2x + 5 = \text{third consecutive odd integer}$$

$$(2x + 1) + (2x + 3) + (2x + 5) = 3,045$$

$$6x + 9 = 3,045$$

$$6x = 3,036$$

$$x = 506$$

$$2x + 1 = 1,013$$

$$2x + 3 = 1,015$$

$$2x + 5 = 1,017$$

16. **135**

Category: Permutations and Combinations

Difficulty: High

Strategic Advice: Like many high-difficulty questions, this one revolves around certain maneuvers that you must remember for Test Day. First, note that each member is playing 9 other members—not 10, since a member doesn't play against himself. Second, note that when person A plays person B, person B is playing person A; that is, the game counts as a game for both players. You're about to see the effect that has on the math behind this question.

Getting to the Answer: 10 players play 9 others each, 3 times each:

$10 \times 9 \times 3 = 270$. Divide 270 in half, to correct the fact that that 270 treats A playing B and B playing A as two separate games, when in fact they're the same single game: $270 \div 2 = 135$.

17. **.2 or $\frac{1}{5}$**

Category: Rates

Difficulty: High

Strategic Advice: Like many especially challenging questions, this one becomes manageable when it is broken down into distinct stages. In particular, try first to get control of how much time the entire project will take; then figure out the portion of it completed by Ambrose.

Getting to the Answer: Ambrose paints $\frac{1}{8}$ room per hour, and each of Benedict and Charles paints $\frac{1}{4}$ room per hour. So in one hour, the three paint $\frac{1}{8} + \frac{1}{4} + \frac{1}{4} = \frac{5}{8}$ room per hour. That means that the three require the reciprocal of $\frac{5}{8}$, or $\frac{8}{5}$, hours to paint the whole room. Again, Ambrose covers $\frac{1}{8}$ room per hour, so $\frac{1}{8} \times \frac{8}{5} = \frac{1}{5}$.

18. **3.2 or $\frac{16}{5}$**

Category: Coordinate Geometry: High Difficulty

Difficulty: High

Strategic Advice: As with all multiple-figure questions, the crucial thinking here involves passing information from one figure to the next—whether that figure is a square, a right triangle, or even a simple line in the xy -plane.

Getting to the Answer: If the square with vertex Z has area 25, the vertical line to Z has length 5, as do all sides of that square.

If the square with vertex Y has area 16, the vertical line to Y has length 4, as do all sides of that square.

If the square with vertex X has area r^2 , the vertical line to X has length r , as do all sides of that square.

Now consider the right triangle with hypotenuse \overline{YZ} : Its horizontal leg has length 4 (since it's the side of a square of area 16) and its vertical leg has length 1 (because it's what's left when a side of length 5 is reduced by 4). The slope of the line on

which \overline{YZ} falls—line ℓ —is therefore $\frac{1}{4}$, because slope is simply a relationship between a change in vertical distance relative to a change in horizontal distance—what in coordinate geometry you may know as the change in y over the change in x : $\frac{\Delta Y}{\Delta X}$. Because the right triangle with hypotenuse \overline{XY} also falls on line ℓ , it also has a slope of $\frac{1}{4}$. The lengths of its vertical and horizontal legs can therefore be put in proportion to $\frac{1}{4}$. The measure of its vertical leg is $4 - r$, and the measure of its horizontal leg is r . So:

$$\frac{4 - r}{r} = \frac{1}{4}$$

$$r = 16 - 4r$$

$$5r = 16$$

$$r = \frac{16}{5}$$

Section 7 (Critical Reading)

1. **C** **Category:** One-Blank
Difficulty: Low
Strategic Advice: Don't look at the answer choices until you make a prediction if at all possible.
Getting to the Answer: The missing word here will be consistent with admiration, so predict something positive, like *copy* his mannerisms.
(A) This is the opposite of what you seek.
(B) This is neutral and doesn't make sense.
(C) Correct; this word is being used as a verb, meaning "to imitate."
(D) This doesn't make sense in the context of the sentence.
(E) This word also doesn't make sense.

2. **A** **Category:** Two-Blank
Difficulty: Medium
Strategic Advice: Know your Keywords; they'll help you move quickly.
Getting to the Answer: *Although* indicates that the meanings of the two parts of the sentence will contrast with one another. Because you cannot determine from the stem's context whether the risk and the public's concern are high or low, begin by discarding answer choices that don't contain contrasting words.
(A) Correct; while *steady* is not necessarily positive in charge, it makes sense in context, as does *waned*.
(B) These words do not contrast.
(C) These words do not make sense as a pair in context.
(D) This pair also lacks an opposition.
(E) Again, no contrast here.

3. **C** **Category:** One-Blank
Difficulty: Medium
Strategic Advice: Analyze Keywords carefully to discern what they really tell you.
Getting to the Answer: The blank in this sentence describes the spelunker's capacity to discern objects in sunlight once her eyes had made the adjustment to seeing in the dark. How might you describe this capacity? *Poor at* sounds like a good prediction.
(A) This is too positive.
(B) This is the opposite of what you want.
(C) This matches the prediction well; hold on to it as you check the remaining possibilities.
(D) This doesn't make sense in context.
(E) This also doesn't make sense based on the sentence

4. **A** **Category:** Two-Blank
Difficulty: Medium
Strategic Advice: Choose the blank that seems easiest to work with.
Getting to the Answer: Because the sentence mentions *the first to attack*, the second blank must refer to the soldiers who are positioned in the front. If someone were facing death, how might you describe them for the first blank? *Brave*. This word is a little easier to predict, so work with the first blank first.
(A) The first blank works well, as does the second, making this the answer. If you weren't sure of either of these words, elimination would have helped.

- (B) The first blank doesn't work here.
 (C) The first word is close, but being in the *cavalry* doesn't necessarily put one more in harm's way.
 (D) The first word is opposite, and the second doesn't make sense.
 (E) The first word works, but the second is opposite to what you need.
5. **B Category:** One-Blank
Difficulty: High
Strategic Advice: Note sentences that suggest the presence of straight definitions.
Getting to the Answer: Sometimes you can make a sentence easier to work with by paraphrasing it. In this case, the stem could be paraphrased as: Given that Shakespeare is a *certain kind* of experience, it's amazing how difficult it is to hear the actors. Clearly, the blank must contain a word that has something to do with speech or sound.
 (A) This doesn't relate to sound.
 (B) This works. Even if you didn't know this word, its root should suggest "hearing."
 (C) This is a tough word, but even words suggested by the root (like "caption") don't make sense here.
 (D) The word itself might seem to go with Shakespeare, but it doesn't relate to hearing.
 (E) Again, this has nothing to do with hearing the lines.
6. **C Category:** Global
Difficulty: Medium
Strategic Advice: After reading any passage, you should be predicting what this question asks for. That practice will help when the question calls for such an answer.
Getting to the Answer: Passage 1 is strongly in favor of studying the influence on a particular work. The correct answer to this question, then, must reference that fact.
 (A) Out of Scope; this does not convey the author's strong position on influence studies.
 (B) Misused Detail; this is a little tricky. Like the author's tone, it is positive about the importance of parallels. But it uses the word *circumstantial*, which comes not from Passage 1 but from Passage 2.
 (C) This matches the prediction and is correct.
 (D) Opposite; Passage 1's author believes that "it is necessary" to know a work's influences.
 (E) Distortion; this warps lines 6–9 by reproducing only a portion of the sentence in a way that changes its meaning.
7. **B Category:** Inference
Difficulty: Medium
Strategic Advice: You should read this question stem before reading the passage to help you look for the four statements that do match what the author says.
Getting to the Answer: Passage 2's purpose is to argue that influence studies contribute "nothing to understanding or appreciating the works." Therefore, a solid prediction of a statement the author of Passage 2 would disagree with is that influence studies do contribute something to such appreciation.
 (A) Opposite; this echoes line 13: "Every work of art is a unique creation."
 (B) matches the prediction; this is the correct answer.
 (C) Opposite; while the author never explicitly says this, she would not necessarily disagree strongly.

- (D) Opposite; the author writes, “Of course, connections between works in various media can be identified.”
 (E) Opposite; the author says this in the last sentence.

8. **B** **Category:** Inference
Difficulty: Medium
Strategic Advice: A great starting place is to summarize each author’s tone.
Getting to the Answer: In what context does the statement occur? The author of Passage 2 uses the sentence to claim that the mere similarities between two writers’ works does not constitute influence. What would the author of Passage 1 say to this? In keeping with her Passage, she would respond with something that argued for the validity and importance of influence.
 (A) Distortion; Passage 1 does not argue that influence *must* occur, only that it is important.
 (B) This looks like a strong candidate and is correct. The notion that similarities are the result of simple coincidence is discarded in Passage 1 in favor of influence theory—“a trail of interconnected influences that reveal the often complex history of a literary work.”
 (C) Distortion; neither passage says anything about how authors are *affected by the world around them*.
 (D) Out of Scope; whether the authors knew each other is not mentioned or implied.
 (E) Extreme; remember to beware of answer choices that employ words like *never* or *always*.
9. **C** **Category:** Inference
Difficulty: Medium
Strategic Advice: An author’s response must match the overall tone of the passage.
Getting to the Answer: The key to this question is *rebut*. How can the author of Passage 2 most effectively get to the heart of this statement and prove it wrong? You can predict that Passage 2’s author will say something about the lack of validity or importance of influence studies; in addition, she may directly address the point made in the statement in the question stem.
 (A) Distortion; this makes it sound as if the purpose were to study the past for its historical value. In fact, the statement suggests that discovering the past can enable one to “look deeply into a literary work.”
 (B) Distortion; Passage 1 does not make the distinction suggested by this choice.
 (C) This works. It echoes both the prediction and lines 14–15 in Passage 2: “connections between works in various media can be identified. But do they have any real importance?”
 (D) Opposite; this is a quote from Passage 1, not Passage 2.
 (E) Out of Scope; this states that literary works are “difficult,” a judgment about which Passage 2 is silent.
10. **D** **Category:** Inference
Difficulty: Medium
Strategic Advice: The author refers to artistic expression several times in the passage, so you can’t go back to a specific sentence or paragraph to research this question.

Getting to the Answer: Since the question is so broad, go through the answers, testing each to see if it fits with the passage.

(A) Extreme; although the quilts were hung in a museum, the author never states that artistic expression was the *primary* purpose of the quilts—they were probably also intended to keep people warm.

(B) Distortion; the author likes the quilts, but never indicates that they are *more compelling* than other mediums such as painting or sculpture.

(C) Extreme; although the author says that it's easier to appreciate works attributed to specific people, he never says that anonymous works *cannot* be appreciated.

(D) This fits the passage well. The author feels that quilts, which often serve as functional objects, can serve as a means of artistic expression.

(E) Distortion; although some quilts display narratives, it doesn't follow that *all* forms of artistic expression usually involve storytelling.

11. **D** **Category:** Detail

Difficulty: Medium

Strategic Advice: With no line reference, pinpoint the reference from clues in adjoining questions.

Getting to the Answer: In paragraph 2, the author states that, in addition to Ringgold's modern narrative quilts, "there is actually a long tradition of narrative in quilting."

(A) Opposite; this contradicts the prediction.

(B) Opposite; this contradicts the prediction.

(C) Distortion; the selection of fabrics can help to tell a story, but there's no indication that this is the *primary* method.

(D) This fits well with the prediction.

(E) Distortion; this is true of Ringgold's work, but not the other narrative quilts that are described.

12. **C** **Category:** Function

Difficulty: Medium

Strategic Advice: Read around the reference to get an idea of how it is used.

Getting to the Answer: The sentence in question begins with the phrase "For example." So, Powers's work is an example to back up the preceding statement—that there is a long history of narrative quilts.

(A) Out of Scope; the author isn't countering an argument.

(B) Distortion; this doesn't work either, since Powers's work is support for another idea. It is not itself a thesis.

(C) This matches the prediction nicely.

(D) Out of Scope; you don't know that Powers's work is *highly influential*.

(E) Opposite; the author is saying that the initial impression of Ringgold's work as radically different from tradition quilts is wrong.

13. **B** **Category:** Vocab-in-Context

Difficulty: Medium

Strategic Advice: Make a prediction; this should help you avoid more common meanings, which are often wrong.

Getting to the Answer: In this instance, "visibility" means that Ringgold's work is being seen by a lot of people, so predict something like *profile*.

- (A) Out of Scope; this is related to a common meaning but doesn't work.
- (B) This fits well.
- (C) Out of Scope; this relates to another common meaning but doesn't make sense.
- (D) Out of Scope; this is related to a common meaning but doesn't work.
- (E) Out of Scope; this doesn't work at all.

14. **A** **Category:** Function
Difficulty: Medium
Strategic Advice: Read around the reference to get an idea of how it is used in the passage.
Getting to the Answer: The author notes that critics appreciated the quilts when they “were hung on walls instead of spread on beds.” In other words, hanging the quilts in a museum helped people to see the artistic merit of the quilts. The quote from the observer helps to make this point.
- (A) This matches the prediction nicely.
 - (B) Out of Scope; the author is speaking of the perception of these quilts, not of *art*.
 - (C) Out of Scope; the author is speaking of the perception of these quilts, not of *functional objects* in general.
 - (D) Misused Detail; the author might agree with this, but Ringgold is discussed earlier in the passage.
 - (E) Out of Scope; the author never indicates that the appreciation of quilts should have happened sooner.

Moral Development

The topic of this passage is moral development in children and how it takes place. The first paragraph provides background on the phenomenon, explaining that a number of theories have arisen to account for it. The second paragraph introduces the passage's main point—there are three predominant schools of thought that seek to explain how children acquire an ethical code. The paragraph goes on to detail one common thread among the theories: that children are born with a “predisposition toward moral behavior.” Each of the next three paragraphs explains one of the theories: biological determination, learned behavior, and intellectual development. The concluding paragraph indicates that experts agree that no one theory offers the sole explanation for the phenomenon—one must take them together to get the fullest picture of the issue.

15. **D** **Category:** Global
Difficulty: Low
Strategic Advice: The question asks for the purpose of the passage. Look for an answer that reflects the tone of the passage as a whole, paying special attention to the first paragraph, and use elimination to narrow down your choices, if necessary.
Getting to the Answer: At the end of the first paragraph, the author tells us that moral development has become a popular field and that “competing theories” provide different explanations. He spends the rest of the passage discussing each of these theories, so make a prediction accordingly.
- (A) Opposite; the author tells us in the last paragraph that psychologists agree that there is not one *definitive cause*.

- (B) Out of Scope; though the author mentions *teenage violence*, it is not a critique, nor is it the focus of the passage.
 (C) Opposite; the author states in the first paragraph that the majority of children behave morally.
 (D) This matches the prediction nicely.
 (E) Out of Scope; the author never compares youth of different time periods.

16. **A** **Category:** Function
Difficulty: Medium

Strategic Advice: *In order to* in the question stem lets you know that you are looking for the function of this reference. Use Keywords in the sentence to make your prediction.

Getting to the Answer: The author mentions “cheating scandals” as part of a list of other immoral behaviors, which serves to show some concrete cases of “children...wreaking havoc.” Look for an answer choice that reflects this.

- (A) This matches your prediction very well.
 (B) Out of Scope; the author never says anything about such *low expectations*.
 (C) Misused Detail; the author tells us in the following sentence that most young people behave morally.
 (D) Out of Scope; the author is not focusing on *media sensationalism* here.
 (E) Distortion; the author is implying that teenage violence and cheating scandals are similar problems.

17. **C** **Category:** Detail
Difficulty: Low

Strategic Advice: This question asks you to extract a detail directly from the passage. Locate the relevant text and use Keywords to help you make a prediction.

Getting to the Answer: The author tells us that “despite...differences” in the theories, they all “agree on one key point,” that children are born with tendencies toward moral behavior. Your prediction should reflect this.

- (A) Distortion; though the theories have one point in common, the second and third theories are unrelated to the first in other ways.
 (B) Misused Detail; though the first theory is based on biological development, the second and third are not.
 (C) This correctly captures the point of agreement.
 (D) Out of Scope; the paragraph says nothing about who invented these theories.
 (E) Opposite; the author tells us that they agree on one point.

18. **C** **Category:** Vocab-In-Context
Difficulty: High

Strategic Advice: Be sure to look to the surrounding text for context, and focus on secondary meanings of the word.

Getting to the Answer: Remember that the correct answer to a Vocab-in-Context question will not normally be the primary meaning of the word. The author states that children have a “fundamental” bias “toward” moral behavior. These Keywords should help you to see that “bias” is being used to describe an *inclination* or a *tendency*.

- (A) Out of Scope; the author is talking about an innate tendency, not a learned belief.
 (B) Distortion; if this behavior is innate, then children would lack the intellectual capacity to make any prejudgments.

- (C) This fits the prediction perfectly.
 (D) Distortion; this comes close, but *preference* implies the same conscious decision that (B) does.
 (E) Distortion; again, newborn infants are not capable of making *decisions*.

19. **D** **Category:** Function
Difficulty: Medium
Strategic Advice: With Function questions, look for your answer in the sentences directly surrounding the relevant text.
Getting to the Answer: The author states that “like empathy, other moral emotions such as shame, guilt, and anger” arise in infants everywhere, supporting the earlier statement that moral behavior—both positive and negative—are inborn within all of us. Base your prediction on this.
 (A) Opposite; the author tells us that babies are born with these emotions. They don’t *learn* them.
 (B) Out of Scope; the author never makes this implication.
 (C) Opposite; he tells us that these emotions are “like” empathy.
 (D) This matches your prediction nicely.
 (E) Out of Scope; the author does not imply that these emotions make up *the roots of immoral behavior*.
20. **B** **Category:** Vocab-in-Context
Difficulty: Medium
Strategic Advice: To determine the meaning of “code” in context, research the text surrounding the word, and be careful—the most common meaning is usually incorrect.
Getting to the Answer: The author uses “code” to describe a basic *value system* innately present in humans. Use this as your prediction.
 (A) Distortion; this plays off of an alternate meaning of “code,” having to do with computers. Also, if it is innate, it cannot be a *response*.
 (B) This matches well.
 (C) Distortion; this derives from another meaning of the word.
 (D) Distortion; this choice references the same meaning as does (C), as in a “secret code.”
 (E) Out of Scope; this meaning of “code” pertains to the construction of buildings, which makes no sense in context.
21. **E** **Category:** Inference
Difficulty: Medium
Strategic Advice: *Likely* in the question stem indicates that this is an Inference question. Be sure you understand the context in which the phrase is used, and remember not to make unnecessarily large leaps in logic.
Getting to the Answer: According to the author, learning theorists contend that children base their behavior on their perception of whether or not they will be caught. While a prediction may not be easy to make, know that the answer will not stray far from this concept.
 (A) Opposite; if children know enough to avoid behavior that will be punished, they certainly possess such an *awareness*.
 (B) Opposite; the author has already told us that all three theories accept the idea of children as inherently moral.

- (C) Misused Detail; this concept is not discussed until the next paragraph.
 (D) Distortion; while children may behave a certain way to receive “reward,” this does not translate into a craving for *parents’ approval*.
 (E) This makes sense. If they don’t think they’ll be caught, such children will do whatever they please.

22. **A** **Category:** Detail

Difficulty: Medium

Strategic Advice: Locate the relevant text and search for keywords in and around the sentence. You should be able to put your finger directly on the answer to the question; it will just be slightly rephrased.

Getting to the Answer: The next sentence begins with “thus,” indicating a ramification of the prior statement. The author states that children “learn that relationships that cultivate reciprocity and caring are fairer.” Look for an answer that reflects this sense of fairness and common good.

(A) This works well; *equity* and *reciprocity* are similar concepts. Even if you weren’t sure of their meaning, the similar words “equal” and “reciprocal” could have helped you.

(B) Misused Detail; this draws from the prior paragraph on learning theories.

(C) Opposite; this also fits better with the prior paragraph.

(D) Distortion; the concept of fairness certainly fits, but the passage doesn’t restrict this only to *those who are less fortunate*.

(E) Distortion; this might sound close, but it focuses too much on not letting others take advantage of you, which is not the point here.

23. **B** **Category:** Function

Difficulty: High

Strategic Advice: Read around the reference, and pay attention to both content and tone of the author.

Getting to the Answer: In the previous sentence, the author tells us that “there cannot be one universal reason” driving moral development. The implication is that, in such a broad and diverse field, we must use all of these theories if we are to gain a truthful vision of how children grow ethically. Your prediction should reflect this *combination of ideas*.

(A) Distortion; the author is talking about the differing rationales presented by the theories, not the ways in which the individual theories might be interpreted.

(B) This fits perfectly; *synthesis* recalls *combination* from the prediction.

(C) Distortion; the author is more concerned with the combined ramifications of the theories than assessing each one individually.

(D) Out of Scope; the author is discussing moral growth, not *intellectual progress*.

(E) Opposite; the author has already told us that psychologists do take stances—three of them, in fact.

24. **A** **Category:** Global

Difficulty: Medium

Strategic Advice: To pinpoint the author’s attitude toward a particular topic, pay special attention to tone. How has the author approached the topic and presented the different theories?

Getting to the Answer: Throughout the passage, the author has very rarely weighed in with opinion. He has been careful to give each theory equal time and

has not discussed which one he adheres to. Though he does not express much enthusiasm, he certainly seems interested and knowledgeable about the topic. Use elimination to help you out if you're having difficulty.

(A) This fits with the prediction above.

(B) Extreme; nothing the author writes indicates feelings of *apathy* toward the theories.

(C) Extreme; there is nothing especially enthusiastic about the author's presentation of the theories, and *unrestrained* makes this choice even less plausible.

(D) Out of Scope; the author never expresses any doubts towards the validity of these theories, but rather presents some support for each of them.

(E) Extreme; the author never expresses a negative attitude towards these theories.

Section 8 (Math)

1. **C** **Category:** Inequalities: Low and Medium Difficulty
Difficulty: Low
Strategic Advice: Remember that not all questions are designed to challenge you conceptually; this one is designed to reward meticulousness—so move through it carefully, paying special attention to tenths versus hundreds versus thousandths.
Getting to the Answer:
(A) $7.808 > 7.8$
(B) $7.907 > 7.8$
(C) $7.708 < 7.75 < 7.8$
(D) $7.07 < 7.708$
(E) $7.88 > 7.8$
2. **A** **Category:** Puzzles and Logic
Difficulty: Low
Strategic Advice: Invest a few seconds in drawing a diagram. As long as you translate correctly from words to picture, you'll have the answer in no time.
Getting to the Answer:
 $P-Q-S-R$
(A) Q is between P and S —must be true.
(B) R is between Q and S —must be false.
(C) S is between P and Q —must be false.
(D) P is between S and R —must be false.
(E) P is between Q and R —must be false.
3. **E** **Category:** Equations
Difficulty: Medium
Strategic Advice: Sometimes even early questions are laced with traps. Here, bet that a wrong choice awaits test takers who solve for n rather than $4n$.
Getting to the Answer:
 $7n + 4 = 10n - 8$
 $12 = 3n$
 $4 = n$
 $16 = 4n$
4. **B** **Category:** Quadrilaterals and Other Polygons
Difficulty: Medium
Strategic Advice: The numbers in the choices may be a little too close to make eyeballing a promising guessing strategy here. If you're unsure where to begin, remember that SAT Math questions only rarely contain extraneous information. So those numbered angles are probably important.
Getting to the Answer:
 $180^\circ - (80^\circ + 50^\circ) = 50^\circ = b^\circ$ (vertical angles)
 $180^\circ - (75^\circ + 60^\circ) = 45^\circ = a^\circ$ (vertical angles)
 $a^\circ + b^\circ = 45^\circ + 50^\circ = 95^\circ$
5. **E** **Category:** Rates
Difficulty: Medium
Strategic Advice: A great beginning with almost any question is to carve out a road that will get you to the answer. If you get the number of A s printed per hour,

and then get the number of B s, and then find the difference between them, you'd have your answer—so go ahead!

Getting to the Answer: In one hour—60 minutes— A gets printed $\frac{60}{4} = 15$ times and B gets printed $\frac{60}{5} = 12$ times. $15 - 12 = 3$.

6. **D** **Category:** Inequalities: High Difficulty
Difficulty: Medium
Strategic Advice: Here's an example of one of the SAT's new topics, a somewhat fancy absolute value inequality. It may look intimidating at first glance, but it's actually a great illustration of how there's almost always more than one quick, easy way to answer a question correctly.
Getting to the Answer:
 Method I: Backsolve. Only (D) does not make the given inequality a true statement.
 Method II: Algebra:
 If $|1 - x| \geq 1$, then $1 - x \leq -1$ or $1 - x \geq 1$.
 Remember the "EXCEPT" in the question stem:
 If $1 - x \leq -1$, $x \geq 2$, ruling out (E).
 If $1 - x \geq 1$, $x \leq 0$, ruling out (A), (B), and (C).
7. **E** **Category:** Ratios: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: Another illustration of an all-important idea: Don't pressure yourself by asking, "What is *the* way to do this?" There are probably many ways—all you need to do is find one.
Getting to the Answer:
 Method I: Pick numbers. If $r = 3$ and $b = 2$, 3 out of 5 marbles are red. Which choice "says" that? Only (E).
 Method II: This is a part : whole ratio in which the part in question is r and the whole is $r + b$.
8. **B** **Category:** Percents
Difficulty: Medium
Strategic Advice: Stress management is an important part of Test Day success. If you see something like this and feel anxious, consider this: There are two distinct—and *not* very complex—issues in this question. Manage them one by one and you'll be fine. First find x ; then find x percent of 40.
Getting to the Answer:
 $1.75x = 140$
 $x = \frac{140}{1.75} = 80$
 $0.8(40) = 32$
9. **D** **Category:** Sets
Difficulty: Medium
Strategic Advice: Here's another example of a new 2005 SAT topic: sets. Notice, though, that what makes the question tricky has nothing to do with fancy set theory, but rather with the age-old SAT topics of prime numbers and prime factors.

Getting to the Answer:

$$Y = \{1, 2, 3, \dots, 50\}$$

$$X = \{\text{primes, perfect squares, perfect cubes, etc.}\}$$

$$X \cap Y = \{2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 2^2, 2^3, 2^4, 2^5, 3^2, 3^3, 5^2, 7^2\}$$

10. **D Category:** Proportions
Difficulty: Medium
Strategic Advice: The key to this question is setup; do this part correctly, and from there you're merely solving a proportion.
Getting to the Answer:
- $$\frac{1}{32} = \frac{x}{256}$$
- $$32x = \frac{1}{2}(256)$$
- $$32x = 128$$
- $$x = 4$$
11. **A Category:** Exponents: Low and Medium Difficulty
Difficulty: Medium
Strategic Advice: Long before Test Day, be sure you know your exponent rules cold—you'll be sure to be rewarded for it by questions such as this one.
Getting to the Answer:
- $$p^{12} > q^{48}$$
- $$p^{12} > (q^4)^{12}$$
- For this statement to be true, p would have to be more than q^4 .
12. **C Category:** Averages: High Difficulty
Difficulty: High
Strategic Advice: Here's another example of a question that looks tough on first blush, but becomes easy when you break it down into a series of manageable tasks—in this case, first determining the numbers in the set, and then thinking about the average of the digits in each.
Getting to the Answer: First task: {111, 112, 121, 211, 122, 212, 221, 222}
Second task: In order for the average of the digits to be an integer, the digits must sum to a multiple of 3. This is the case only with 111 and 222.
13. **D Category:** Sequences
Difficulty: High
Strategic Advice: Questions about exponential growth are new to the 2005 SAT and, like this one, can be very challenging. Here the key is to realize that: 1. tripling just means multiplying by three; 2. something that triples every 3 minutes triples 10 times in a half-hour. A simple way of saying "multiply by 3, ten times" is 3^{10} .
Getting to the Answer: The total growth that occurred, times the original population, equals the answer:
 $(3^{10})(3^{10}) = (3^{20})$
14. **D Category:** Probability: High Difficulty
Difficulty: High
Strategic Advice: This question is especially tough because it involves both

probability and Roman numerals—two areas that typically challenge even the strongest test takers. A good beginning is to consider one Roman numeral at a time, eliminating choices as you go.

Getting to the Answer:

I: The probability that n is the median of the set is zero. Given that the set contains an even number of consecutive integers, it's impossible for the median of the set to be a member of the set. I. must therefore be included in the answer (because $0 < \frac{1}{2}$), so eliminate (B) and (C).

II: The probability that n is odd is $\frac{1}{2}$. Again, given that the set contains an even number of consecutive integers, exactly half the integers must be even and exactly half must be odd. II. must therefore be excluded in the answer (since it's not the case that $\frac{1}{2} < \frac{1}{2}$), so eliminate (E).

III: The probability that n is a multiple of three must be less than $\frac{1}{2}$. In fact, whether you begin the chain of consecutive integers with a multiple of three, or one-more-than-a-multiple-of-three, or two-more-than-a-multiple-of-three, you'll always find that 4 of the twelve integers — ($\frac{1}{3}$ of them, that is) — are multiples of three.

III must therefore be included in the answer (since $\frac{1}{3} < \frac{1}{2}$), leaving (D) as the answer.

15. **D** **Category:** Coordinate Geometry: High Difficulty

Difficulty: Medium

Strategic Advice: Don't let coordinate geometry questions intimidate you. In many cases, they simply mask very basic plane geometry in a fancy setting; but as this question shows, you can train yourself to see past the fancy packaging to the simple product inside it.

Getting to the Answer: Area of a rectangle = base \times height.
In $OXYZ$, base = 3 and height = 10: $10 \times 3 = 30$.

16. **C** **Category:** Coordinate Geometry: Low and Medium Difficulty

Difficulty: Medium

Strategic Advice: Remember that parallel lines have the same slope. If the equation of a line is given to you in the form $y = mx + b$ you can very easily pick out m as the slope and b as the y -intercept.

Getting to the Answer: Since $y = 4x + 5$ is the equation of line l , the slope of line l (and of line m) is 4. Now you have the slope and a point (2, 6) for line m , and you can find the y -intercept by plugging this information into the slope-intercept form.

$$\begin{aligned} y &= mx + b \\ 6 &= 4(2) + b \\ -2 &= b \end{aligned}$$

Section 9 (Critical Reading)

1. **D** **Category:** One-Blank
Difficulty: Medium
Strategic Advice: Pay attention to punctuation. Semicolons often indicate text defining the missing word.
Getting to the Answer: If you didn't know the term "Renaissance Man," you should still pick up on *versatility*. If someone were versatile, you would expect her to be skilled at a number of different things.
(A) A *novice*, by definition, lacks skill in whatever they're doing.
(B) It doesn't make sense to refer to a *neighbor* of the arts and sciences.
(C) Be careful here. Interpreting the arts and sciences is too specific; it also implies a higher level of skill than does *versatility*.
(D) This is the right choice. A *practitioner* is one who practices, or is able to do, something.
(E) Nothing in the sentence signals that da Vinci was a *detractor* of the arts and sciences.
novice: beginner
interpreter: translator; one who uses art to represent something
detractor: one who speaks ill of
2. **D** **Category:** Two-Blank
Difficulty: Medium
Strategic Advice: Pay attention to Keywords—some of the smallest and simplest words can help you most of all.
Getting to the Answer: *But* indicates a contrast between the two blanks. If the man had *done* or *committed* the crimes, he could have *escaped prosecution* by establishing *innocence*. Even if you didn't know the meaning of *concoct*, you could still have pieced together the meaning.
(A) If the client *abhorred* heinous crimes, he probably didn't commit them, and therefore he wouldn't have to escape prosecution.
(B) This just doesn't make sense—if the client *condoned* the crimes, and showed *enthusiasm* for the crimes, he probably wouldn't escape prosecution.
(C) The second blank doesn't give the proper contrast—if the client *performed* the crimes, he probably was *immoral*.
(D) This matches the prediction perfectly.
(E) If the man suggested that he felt *repentance*, that also implies that he was guilty to begin with, which should lead to prosecution.
abhor: to hate; to detest
profundity: depth of intellect or meaning
3. **E** **Category:** One-Blank
Difficulty: Medium
Strategic Advice: Punctuation can help you as well.
Getting to the Answer: The semicolon signals that what follows it defines the word that precedes it. The sentence refers to an unusual characteristic of amber: *It floats in water*. Start with *floatability* if necessary, and look for a match.
(A) *Consistency* has no connection to this concept, so eliminate it.
(B) This word has nothing to do with floating.
(C) This word also doesn't fit here.

- (D) This word may be applied to gemstones at times, but it does not work in the context here.
 (E) This word works well with your prediction.

4. **C** **Category:** Two-Blank
Difficulty: Medium

Strategic Advice: Two-Blank Sentence Completions are nothing to fear; you can usually expect more Keywords to help you.

Getting to the Answer: If Markievicz was *rebellious*, then she must not have been like most women of the time, who were not *involved in political life* and remained at home. Predict opposites for each blank: *getting involved in* and *fleeing*.

(A) The second blank doesn't match your prediction, and it doesn't make sense to speak of *obtaining* politics.

(B) If Markievicz rebelled against the fact that women were not involved in political life, then she must have *participated in*, not escaped politics.

(C) Correct; each of these words acts as a synonym for the respective parts of the prediction.

(D) This is exactly opposite to the prediction—Markievicz would have pursued, not ignored, politics.

(E) This is also opposite to the prediction.

succumb: to submit; to give up

subvert: to undermine; to corrupt

disavow: to renounce knowledge of or responsibility for

5. **D** **Category:** One-Blank
Difficulty: High

Strategic Advice: With tough vocab, you'll often find other parts of the sentence that offer an outright definition of the missing word.

Getting to the Answer: The sentence offers a straight definition—what art form communicates only *through facial expressions and gestures*? If you don't know, use your knowledge of word roots and process of elimination.

(A) A *mediator* usually has to talk in order to resolve a conflict productively.

(B) An *ensemble* is just a performance group. Depending on the type of performance, they may talk a good bit.

(C) This choice is the opposite of what you're looking for. An *elocutionist* is a public speaker. If you didn't know the word, it should have reminded you of "eloquent," a description that certainly suggests talking.

(D) This choice works. *Pantomime* is the art of expression through gesture and facial expression. No words are used.

(E) A *troubadour* is a minstrel who sang songs and/or recited poetry, both of which involve vocalization.

mediator: one who reconciles differences between disputants

6. **C** **Category:** Two-Blank
Difficulty: High

Strategic Advice: Choose the blank that gives you more to work with. Here, that is the second one.

Getting to the Answer: The word that fills the second blank describes what the candidate *refused to do*, instead choosing to address the issues. So if he did something positive, he must have *refused to do* something negative. And you would expect a negative reaction to a negative action by the opponent.

- (A) These words are tough, but the first is positive, and the second is not supported by the context, so just knowing one of those facts would be enough to throw this out.
- (B) The first blank works, but the second doesn't make sense. You wouldn't expect the candidate to surrender his campaign simply because of an attack by his opponent.
- (C) The first word is appropriately negative. The second is not necessarily negative, but it makes sense—the candidate refused to do what his opponent was doing. This is the correct choice.
- (D) The first blank is too positive.
- (E) Neither word makes sense in context.
- extol*: to praise highly
prevaricate: to stray from or evade the truth
deride: to ridicule
capitulate: to surrender; to give in
relinquish: to let something go; to release

Hemingway's Legacy

In Passage 1, the author uses the first paragraph to discuss the realism of Hemingway's work, and its depiction of characters losing their connection to traditional values in favor of more sensual pleasures. The second paragraph looks specifically at two of Hemingway's novels and what they say about post-World War I values, both for families and for individuals.

Passage 2 hits many of the same notes as Passage 1 in its first paragraph. Beginning with the second paragraph, however, this author diverges into a discussion of Hemingway's unique literary style, particularly its terseness and realism. In the final paragraph, the author addresses and dismisses critics of his view of Hemingway's stylistic impact.

7. **E** **Category:** Inference
Difficulty: Medium
Strategic Advice: For larger-scale inferences, pinpoint the author's tone.
Getting to the Answer: From reading the passage, you know that the author looks upon Hemingway's legacy favorably. The correct answer must therefore have a positive charge.
(A) Out of Scope; the author discusses Hemingway's legacy—what he has left future generations.
(B) Out of Scope; this is not positive enough.
(C) Opposite; this is too negative.
(D) Out of Scope; this does not properly characterize the tone of the passage.
(E) This matches the prediction nicely.
8. **D** **Category:** Function
Difficulty: High
Strategic Advice: Read the reference and surrounding lines, if necessary, to understand what the author is trying to do.
Getting to the Answer: When Catherine dies, her lover realizes that he no longer feels the same way about death and life; predict an answer like *show how events can change one's outlook on life*.
(A) Out of Scope; no mention is ever made of Hemingway's wife.

(B) Misused Detail; the hedonistic tendencies of Hemingway’s characters are mentioned, but Catherine’s death is not meant to provide an example of these tendencies.

(C) Out of Scope; there is no indication in the passage that Catherine’s death was contrasted with Hemingway’s real-life experiences.

(D) Correct; this accurately captures the author’s purpose.

(E) Misused Detail; this is a reference to Passage 2. Hemingway’s literary style is not mentioned in Passage 1.

9. **D** **Category:** Vocab-in-Context

Difficulty: Medium

Strategic Advice: Read for context to be able to predict an answer.

Getting to the Answer: Reading the context around line 29, you see that changes in values are described as occurring particularly within the “sphere” of the American family. Predict something like *specific area*.

(A) Distortion; you wouldn’t refer to something *within the ground*.

(B) Out of Scope; this may sound close, but you wouldn’t really refer to a family as a *topic*.

(C) Distortion; this refers to an alternative definition of “sphere” and makes no sense here.

(D) This captures the essence of “sphere” in the context of the passage. The word is used to refer to a specific domain or realm.

(E) Out of Scope; this is too specific.

10. **A** **Category:** Vocab-in-Context

Difficulty: High

Strategic Advice: Read for context to be able to predict an answer.

Getting to the Answer: The prior sentence refers to “this erosion of family values,” and earlier references to “physical, earthly pleasures” should lead you to use those words as a guide in finding the correct choice.

(A) This fits the prediction nicely.

(B) Distortion; this seems close, but the seeking of pleasure is not automatically *immoral*.

(C) Distortion; this does not work in context.

(D) Opposite; this does not match the prediction.

(E) Out of Scope; this does not make sense in context.

11. **B** **Category:** Detail

Difficulty: High

Strategic Advice: On broader questions, rely first on your recollection of the passage, then research the passage for confirmation.

Getting to the Answer: You know that the answer to this question should come near the end of the passage. Look through the final paragraph, which states that “Hemingway’s great legacy...captures the mood of...the unorthodox views and feelings of an important generation of post-war writers.” Let this guide your prediction.

(A) Misused Detail; Passage 2, not Passage 1, mentions Hemingway’s influence on later writers.

(B) This works. It conveys the main thrust of the first passage, which is Hemingway’s role as the preserver of the cultural legacy of his era.

- (C) Misused Detail; it captures the primary argument of Passage 2, not Passage 1.
 (D) Distortion; the author mentions Hemingway's use of satire only briefly, and he does not say that Hemingway developed modern satire.
 (E) Out of Scope; Hemingway's *original manuscripts* are never mentioned by either author.

12. **B** **Category:** Vocab-in-Context

Difficulty: Low

Strategic Advice: Read for context to be able to predict an answer.

Getting to the Answer: The author writes that, through the personal tragedy of his characters, Hemingway conveyed “a real sense of the horrors and repercussions of World War I.” Reading the sentence and the preceding text, you see that “tragedy” most closely means *misfortune*.

(A) Out of Scope; this refers to dramatic tragedy, such as *King Lear*.

(B) This matches the prediction exactly.

(C) Distortion; this is not strong enough.

(D) Out of Scope; this plays on the assumption that tragic characters suffer a *downfall*.

(E) Opposite; this is totally different from the prediction.

13. **E** **Category:** Function

Difficulty: High

Strategic Advice: Read the reference and surrounding lines, if necessary, to understand what the author is trying to do.

Getting to the Answer: The first paragraph recounts and supports the view that Hemingway's assessment of the mood of his moment in history rises to the level of greatness. The author proceeds in subsequent paragraphs to *suggest that, instead, Hemingway's true legacy was his innovative style of writing*.

(A) Distortion; the author goes on to offer an alternative to, not to bolster, the argument advanced in the first paragraph.

(B) Misused Detail; it is in the subsequent paragraphs, not the first, that the author presents an alternative view.

(C) Extreme; the author thinks that the traditional view is incorrect, but not “completely unfounded.”

(D) Opposite; the first paragraph offers evidence for the traditional view of Hemingway, not the author's point of view.

(E) Correct; this matches the overall structure of the prediction.

14. **D** **Category:** Inference

Difficulty: Medium

Strategic Advice: Read around the reference. The correct answer will not be far removed from what is stated there.

Getting to the Answer: You can infer from the gist of Passage 2 that the author thinks that “cultural preservation” efforts aren't as important as Hemingway's innovative style.

(A) Opposite; the author thinks that the *style* is more important.

(B) Distortion; the author mentions Victorian literature, but never claims that Hemingway developed it.

(C) Distortion; interest in Hemingway's novels was revived during the Vietnam War, but this did not necessarily have anything to do with *ending the war*.

(D) This matches the prediction nicely.

(E) Out of Scope; no other nations are mentioned in either passage.

15. **D** **Category:** Detail
Difficulty: Low
Strategic Advice: Return to the reference given and read carefully. The answer will be in the passage, just slightly rephrased.
Getting to the Answer: This question epitomizes the importance of reading before and after the cited line for context. Line 72 itself tells you that Hemingway’s style was “innovative,” but read further: “Hemingway’s realism and unornamented prose ushered in a great shift in American literary history.” What one-word description captures this? Something like *realistic* or *unornamented* works fine.
 (A) Opposite; this is hardly a word to match with “innovative.”
 (B) Opposite; the next sentence describes Hemingway’s style as “terse.”
 (C) Distortion; while the author describes Hemingway’s style as “unornamented,” you don’t know that it was oversimplified.
 (D) This matches very well.
 (E) Distortion; this makes too much of Passage 1’s (the wrong passage) minor mention of Hemingway’s use of satire.
16. **A** **Category:** Detail
Difficulty: Medium
Strategic Advice: With no line reference, rely on your notes and recollection first, and then skim the passages to confirm your answer.
Getting to the Answer: In this question, you need to compare the approaches of the two authors, to find the difference in their argument structure. The question is pretty broad, so work through the choices.
 (A) This looks good. Only in Passage 2 does the author refer to other writers on Hemingway critics.
 (B) Out of Scope; employs second-person address.
 (C) Out of Scope; neither passage uses a personal anecdote.
 (D) Distortion; multiple Hemingway novels are mentioned by both authors, but none are identified as *early* or *late* works.
 (E) Opposite; both authors mention specific Hemingway characters, not just the author of Passage 2.
17. **E** **Category:** Detail
Difficulty: High
Strategic Advice: With no line reference, rely on your notes and recollection first, and then skim the passages to confirm your answer.
Getting to the Answer: This is too broad to make a prediction, so work through the choices.
 (A) Distortion; only Passage 2 compares and contrasts when discussing Hemingway’s style, compared to that of Victorian writers.
 (B) Out of Scope; neither author uses a personal anecdote.
 (C) Out of Scope; neither author personally attacks his opponents to advocate his position.
 (D) Distortion; only the second passage summarizes a potential counterargument to its main argument.
 (E) This works; both passages reference several specific examples of Hemingway characters and novels in support of some general claims.

18. **C** **Category:** Detail
Difficulty: Medium
Strategic Advice: With no line reference, rely on your notes and recollection first, and then skim the passages to confirm your answer.
Getting to the Answer: Again, work through the choices first, using process of elimination.
- (A) Distortion; this is the crux of the second passage. Passage 1 makes no references to literary style.
- (B) Out of Scope; no mention of *philanthropic work* appears in either passage.
- (C) This works. This is the main thrust of the first passage, and Passage 2 also mentions it in its opening paragraph.
- (D) Distortion; Passage 2 mentions how works of Hemingway were invoked during the Vietnam era, but neither passage suggests that Hemingway himself was involved in these efforts.
- (E) Distortion; the second passage does mention the non-Victorian style of Hemingway's writings. But *animosity* is not part of that discussion. Furthermore, Victorian literature is not even mentioned in Passage 1.
19. **E** **Category:** Global
Difficulty: Medium
Strategic Advice: Look for points common to both passages for questions like this.
Getting to the Answer: Rely on your overall picture of both passages. Both of them deal with Hemingway's legacy, so look for something in that vein.
- (A) Distortion; Hemingway played a part in preserving the writing culture of his time, but this generalizes that to culture in general.
- (B) Out of Scope; this is too broad.
- (C) Out of Scope; this takes too much emphasis off of Hemingway.
- (D) Distortion; this is only one character out of many works of Hemingway cited.
- (E) Correct; this captures the question around which the passages pivot.

Section 10 (Writing)

- 1. B** **Category:** Verb Tenses
Difficulty: Medium
Issues: transition words, style problems
Strategic Advice: Verb tenses must reflect the proper sequence of events in a sentence.
Getting to the Answer: The verb form *having shown* indicates that the second clause happened before the first. In fact, the opposite is true, and (B) corrects this by using the simple past tense in both clauses. It also correctly adds the contrasting transition word *but*. The use of *showing* in (C) leaves the meaning of the second clause incomplete. (D) uses *once* as a transition word, indicating an incorrect sequence of events. (E) unnecessarily introduces the past perfect verb tense.
- 2. D** **Category:** Verb Tenses
Difficulty: Medium
Issues: style problems
Strategic Advice: Unless context makes it clear that more than one time frame is referenced, verb tenses within a sentence should be consistent.
Getting to the Answer: (D) makes the two verbs in the sentence consistent. (B) and (C) use inconsistent verb tenses. (E) leaves the meaning of the second clause incomplete.
- 3. B** **Category:** Run-ons and Fragments
Difficulty: Medium
Issues: verb tenses, relative pronouns
Strategic Advice: A run-on sentence like this one can be fixed in several ways, but only one answer choice will do so without changing the meaning of the sentence or introducing additional errors.
Getting to the Answer: (B) uses the conjunction *although* to make the first clause dependent, which is one way to correct a run-on sentence. Note that the addition of *although* makes *however* redundant, so it is eliminated. (C) does not express the contrast between the two clauses that is present in the original. (D) doesn't eliminate the redundant *however*. (E) misuses the relative pronoun *who*, which is only appropriate when referring to people.
- 4. C** **Category:** Pronouns
Difficulty: Medium
Issues: adjective/adverb, wordiness
Strategic Advice: Pronouns must agree in number with their antecedent nouns.
Getting to the Answer: (C) and (D) both correctly use the plural pronoun *them* to refer to the plural noun *buildings*, but (D) incorrectly uses the adjective *quick* to modify the verb phrase *were constructed*. (B) and (E) do not address the error; additionally, (B) also uses an adjective to modify a verb phrase.
- 5. C** **Category:** Modifiers
Difficulty: Medium
Issues: wordiness
Strategic Advice: Make sure modifying phrases are correctly placed for what they are intended to modify.

Getting to the Answer: As written, this sentence says that *the front tire of my car was driving along the unpaved road*. Although it is slightly longer, (C) correctly puts a person (*I*) rather than a tire behind the wheel of the car. (B) does not address the error. (D) and (E) are wordy and awkwardly structured.

6. **E** **Category:** Subject–Verb
Difficulty: High
Issues: wordiness
Strategic Advice: Subjects and verbs must agree in number.
Getting to the Answer: Here, the singular verb *was* does not agree with its plural subject *two*. Both (D) and (E) correct the error, but (D) is unnecessarily wordy. (B) and (C) do not address the error.
7. **D** **Category:** Run-ons and Fragments
Difficulty: Low
Issues: none
Strategic Advice: A sentence can have multiple nouns and verbs and still be a fragment
Getting to the Answer: This sentence is a fragment. (D) takes the verb *are* out of the modifying phrase *all of which are...* and puts it in an independent clause. None of the other choices addresses the issue.
8. **A** **Category:** Correct as Written
Difficulty: Medium
Issues: run-ons and fragments, wordiness
Strategic Advice: The sentences without errors will be divided between the two Writing Multiple Choice sections.
Getting to the Answer: This sentence sets up a cause (*record-setting ticket sales*), then presents its effect (*the play has been held over*). It contains no error. (B) creates a run-on sentence and changes the cause-and-effect relationship expressed in the original sentence. (C), (D), and (E) are unnecessarily wordy and awkwardly constructed.
9. **D** **Category:** Run-ons and Fragments
Difficulty: Medium
Issues: relative pronouns
Strategic Advice: Although there are several ways to correct a run-on sentence, only one of the answer choices will do so correctly, without introducing a new error.
Getting to the Answer: Here, (D) makes the second clause dependent by replacing the pronoun *them* with *whom*. (B) and (E) do not address the error. (C) incorrectly uses the pronoun *which* to refer to *nine- and ten-year-olds*.
10. **C** **Category:** Parallelism
Difficulty: Medium
Issues: none
Strategic Advice: Items in a series or list should be in parallel form.
Getting to the Answer: (C) changes the third item in the list to conform to the other two. (B) changes the form of the second item to conform to the third, but this still leaves the first item in a non-parallel form. Neither (D) nor (E) addresses the error.

11. **E** **Category:** Ambiguity/Idiom
Difficulty: Medium
Issues: run-ons and fragments
Strategic Advice: When a pronoun has no clear antecedent, it should either be changed or eliminated; the context will tell you which choice is better.
Getting to the Answer: Here, the pronoun *it* has no clear antecedent and *being as* is grammatically incorrect. Only (E) eliminates both errors. (B) misuses the preposition *as*. (C) still has an ambiguous pronoun (*its*). (D) creates a run-on sentence and eliminates the cause-and-effect relationship of the clauses in the original sentence.
12. **D** **Category:** Run-ons and Fragments
Difficulty: Low
Issues: idiom, style problems
Strategic Advice: Two independent clauses improperly combined form a run-on sentence.
Getting to the Answer: Making one independent clause subordinate will solve a run-on problem. Here, only (D) solves the problem without introducing an additional error. (B) is incorrect idiomatic usage. (C) does not address the error. (E) is not acceptable grammatical structure.
13. **B** **Category:** Wordiness
Difficulty: High
Issues: run-ons and fragments
Strategic Advice: Some sentences will be grammatically correct, but may have style problems.
Getting to the Answer: (B) is concise without losing any of the meaning of the original sentence. (C) is unnecessarily wordy. (D) creates a run-on sentence. (E) is a sentence fragment.
14. **A** **Category:** Correct as Written
Difficulty: Medium
Issues: wordiness, style problems, idiom
Strategic Advice: Don't rule out (A); some sentences in this section will have no errors.
Getting to the Answer: This sentence follows the rules of parallel construction; *an artist* is compared to *a singer*. (B) and (C) are unnecessarily wordy and awkwardly constructed. (D) and (E) change the meaning of the sentence; they make the brother more talented as an artist than as a singer, rather than the other way around. (E) also misuses *so* in a parallel construction beginning with *as*.



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