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The SAT **Gotcha** Sheet

30 traps that steal points (and the 3-second fix for each)

"Dude. Slow down. Every trap in here is a point you already earned." — Bolt

✗ The trap

The answer your brain grabs first. It looks right. It's built to look right.

✓ The right answer

What you get when you slow down for three seconds and check one thing.

Gotcha fix

The one-line rule to remember. Say it in your head on test day.

How to use this sheet

1. Cover the answers. Try each question cold.
2. Fell for the trap? Copy its Gotcha fix onto a sticky note.
3. Re-test yourself on those cards two days before your SAT.

15 Math traps

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Desmos cheat codes

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15 Reading & Writing traps

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Your next step

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**M1 Percent of a percent**

A \$100 jacket is 20% off, then another 20% off at checkout. What is the total discount?

~~x 40%~~ (20 + 20)

✓ **36%** ($\$100 \times 0.8 \times 0.8 = \$64$)

Gotcha fix: Stack percents by multiplying: $0.8 \times 0.8 = 0.64$. Never add them.

M2 Average speed

You drive 120 miles at 60 mph, then 120 miles back at 40 mph. What is your average speed?

~~x 50 mph~~ (average of 60 and 40)

✓ **48 mph** ($240 \text{ mi} \div 5 \text{ hr}$)

Gotcha fix: Average speed = total distance $\div$ total time. Never average the two speeds.

M3 Rewrite the base

If $3^x = 5$, what is the value of 9^x ?

~~x 10~~ (just doubled it)

✓ **25** ($9^x = (3^x)^2 = 5^2$)

Gotcha fix: Write 9 as 3^2 . Then $9^x = (3^x)^2$. Square, don't double.

M4 Dividing by x deletes a solution

What are all solutions to $x^2 = 9x$?

~~x x=9 only~~ (divided both sides by x)

✓ **x = 0 and x = 9** ($x(x - 9) = 0$)

Gotcha fix: Never divide by a variable. Move everything to one side and factor.

M5 Answer the question they asked

If $3x + 5 = 20$, what is the value of $2x - 3$?

~~x 5~~ (that's x, not $2x - 3$)

✓ **7** ($x = 5$, so $2(5) - 3 = 7$)

Gotcha fix: Before you bubble, reread the last line. Circle exactly what it asks for.

M6 Absolute value has two cases

What is the sum of all solutions to $|x - 4| = 7$?

~~x 11~~ (only solved $x - 4 = 7$)

✓ **8** ($x = 11$ or $x = -3$)

Gotcha fix: Split it: inside = +7 OR inside = -7. Absolute value almost always means two answers.

M7 Negative flips the inequality

Which describes all solutions to $-3x + 2 > 11$?

~~x $x > -3$~~ (forgot to flip)

✓ **$x < -3$** ($-3x > 9$, divide by -3, flip)

Gotcha fix: Multiply or divide by a negative? Flip the sign. Test one number to confirm.

M8 No solution vs. infinitely many

How many solutions does this system have?

$3x - 2y = 5$ and $6x - 4y = 12$

~~x infinitely many~~ (same slope)

✓ **No solution** (doubled: $6x - 4y = 10$, not 12)

Gotcha fix: Scale one equation to match. Same left side, different right side = parallel lines, no solution.

**M9 Up 25%, down 25% is not a wash**

A \$100 stock rises 25%, then falls 25%. What is the new price?

~~x \$100~~ (+25 - 25 = 0)

✓ **\$93.75** ($100 \times 1.25 \times 0.75$)

Gotcha fix: The second percent hits a new, bigger base. Multiply the factors; never cancel them.

M10 Outliers drag the mean

The value 50 is added to the data set 2, 3, 4, 5, 6. What happens to the mean and median?

~~x Both jump a lot~~

✓ **Mean 4 → about 11.67; median 4 → 4.5**

Gotcha fix: One extreme value yanks the mean. The median only cares about the middle, so it barely moves.

M11 Standard deviation is spread, not size

Which data set has the larger standard deviation: {10, 20, 30} or {110, 120, 130}?

~~x {110, 120, 130}~~ (bigger numbers)

✓ **They are equal** (same gaps of 10)

Gotcha fix: Look at the gaps, not the values. Shifting every number up doesn't change the spread.

M12 Percent growth is exponential

A town of 1,000 people grows by 5% each year. About how many people live there after 3 years?

~~x 1,150~~ (+50 every year, linear)

✓ **About 1,158** ($1,000(1.05)^3 \approx 1,157.6$)

Gotcha fix: "Percent each year" = multiply each year (exponential). "Same amount each year" = add (linear).

M13 Vertex form flips the sign of h

What is the vertex of the graph of $y = 2(x + 3)^2 - 5$?

~~x (-3, -5)~~

✓ **(-3, -5)** ($x + 3 = x - (-3)$)

Gotcha fix: Form is $a(x - h)^2 + k$. Plus inside the parentheses means h is negative.

M14 Circle: the right side is r^2

What is the radius of the circle $x^2 + y^2 - 6x + 4y = 12$?

~~x 12 or $\sqrt{12}$~~ (read it off as-is)

✓ **5** ($(x - 3)^2 + (y + 2)^2 = 25$)

Gotcha fix: Complete the square first (add 9 and 4 to both sides). Then take the square root.

M15 Area scales by k^2

A triangle has area 8. Every side length is tripled. What is the area of the new triangle?

~~x 24~~ (8×3)

✓ **72** (8×3^2)

Gotcha fix: Lengths scale by k , area by k^2 , volume by k^3 .

The 3-second math check

1. Reread the last line. What do they actually want?
2. Check signs and units.
3. Plug your answer back into the original.

Dude. Slow down. Three seconds beats three points.

**RW1 Semicolon = two full sentences**

Because I was tired___ I went to bed.

~~x tired, I~~

✓ **tired, I** ("Because I was tired" can't stand alone)

Gotcha fix: Cover each side of the semicolon. Both halves must work as complete sentences.

RW2 Colon needs a full sentence before it

The recipe calls for___ flour, eggs, and sugar.

~~x for: flour~~

✓ **for flour** (no punctuation)

Gotcha fix: Read only the words before the colon. Not a complete sentence? No colon.

RW3 Comma splice

The museum opened in 1902___ it still draws huge crowds.

~~x 1902, it~~

✓ **1902; it** (or a period)

Gotcha fix: A comma alone can't join two sentences. Use a period, a semicolon, or comma + and/but/so.

RW4 Dashes come in matching pairs

The bridge—finished in 1937___ is still in daily use.

~~x 1937, is~~

✓ **1937—is**

Gotcha fix: Extra info opened with a dash must close with a dash. Match the pair.

RW5 Extra info needs commas on both sides

My aunt, a nurse in Ohio___ runs marathons.

~~x Ohio runs~~

✓ **Ohio, runs**

Gotcha fix: Delete the extra info. Sentence still works? Then it needs a matching comma on each side.

RW6 Its vs. it's

After a slow year, the company cut ___ prices.

~~x it's~~ ("it is prices"?)

✓ **its** (possessive, no apostrophe)

Gotcha fix: Say "it is" in its place. Sounds wrong? Use *its*.

RW7 Subject-verb agreement

The list of supplies on the shelves ___ surprisingly long.

~~x are~~ (matched "shelves")

✓ **is** (the subject is "list")

Gotcha fix: Cross out every "of..." and "on..." phrase. Match the verb to what's left.

RW8 Pronoun agreement

The company announced that ___ would open three new stores next year.

~~x they~~

✓ **it** (one company)

Gotcha fix: A company, team, or group is one thing. One thing gets *it/its*, not *they/their*.

**RW9 Dangling modifier**

Walking to school, ____

~~X the rain soaked Maya.~~ (the rain was walking?)

✓ **Maya got soaked by the rain.**

Gotcha fix: Ask who is doing the action. That person must come right after the comma.

RW10 Transition words

The drug worked well in mice. ____, it failed in human trials.

~~X Therefore~~ (cause)

✓ **However** (contrast)

Gotcha fix: Before reading the choices, label it: contrast, cause, or addition. Then pick the matching word.

RW11 Words in context

Over the next decade, the land *appreciated* sharply in value. As used here, "appreciated" most nearly means

~~X was grateful for~~ (everyday meaning)

✓ **increased**

Gotcha fix: Cover the word, predict your own replacement from context, then match. The common meaning is bait.

RW12 Inference: must be true

Every finalist had won a regional contest. Lena was a finalist. Which choice must be true?

~~X Lena won the final.~~ (could be, not must be)

✓ **Lena won a regional contest.**

Gotcha fix: If the text doesn't force it, don't pick it. "Could be true" is a trap.

RW13 Command of evidence

Claim: bees prefer blue flowers. Which finding best supports the claim?

~~X Bees visit many flowers in spring.~~ (on topic, proves nothing)

✓ **Bees landed on blue flowers twice as often as on yellow ones.**

Gotcha fix: The right answer proves the claim. Just mentioning the topic isn't evidence.

RW14 Quantitative evidence

40% of Town A residents bike; 25% of Town B residents bike. Town B is four times as big. Which is supported?

~~X More people bike in Town A.~~

✓ **A larger share of Town A residents bike.**

Gotcha fix: Check the axis label: percent or count? A bigger share isn't a bigger number.

RW15 Student notes: obey the goal

Notes: The Harlow Bridge opened in 1931. Ruth Kale designed it. It is 2,800 feet long. *Goal: emphasize the bridge's length.*

~~X Ruth Kale designed the 1931 bridge.~~

✓ **The Harlow Bridge stretches 2,800 feet.**

Gotcha fix: Reread the goal. The answer does exactly that, even if it skips most notes.

The 3-second grammar check

1. Find the real subject and verb.
2. Mark where each full sentence ends.
3. Two grammatical choices? Pick the shorter one.

"Sounds okay" is how the trap gets you.



The Digital SAT gives you a Desmos graphing calculator on every math question. These five moves turn slow algebra into a few seconds of typing. Type the green line exactly.

1 Intersect to solve a system

Graph both equations and tap the point where they cross. That point is the solution (x, y) .

$y=2x+3$ then $y=-x+9$
→ tap the crossing: $(2, 7)$

2 Regression for "line of best fit"

Put the data in a table, then use a tilde ($\sim$) to make Desmos find the best-fit slope and intercept.

$y_1 \sim mx_1 + b$
→ read m and b off the results

3 Sliders for "for what value of k "

Type the equation with k , add the slider, and drag until the graph does what the question describes.

$y=x^2-6x+k$
→ exactly one solution when the vertex touches the x -axis: $k = 9$

4 Graph to count solutions

Number of real solutions = number of times the graph hits the x -axis (or the other graph).

$y=x^2-4x+5$
→ never touches the x -axis: 0 real solutions

5 Table to test answer choices

Define the function, add a table, and type each answer choice as an x value. The one that gives 0 (or the target) wins.

$f(x)=x^3-2x^2-5x+6$
→ table $x = 2, 3$: $f(3) = 0$, so 3 is a solution



30 traps down. Want one a day?

This sheet is the cheat code. **Gotcha Daily** is the practice that makes it automatic, so you spot the trap before it spots you.

- ✓ **10 minutes a day.** A short drill of fresh, original SAT-style traps, Math and Reading & Writing.
- ✓ **Animated explainers** for every miss, in the same "fall for it, catch it, fix it" style as our videos.
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No pressure. Keep this sheet either way. — Bolt

Upcoming SAT dates: Dec 5, 2026 (register by Nov 20) · Mar 6, 2027 · May 1, 2027 · Jun 5, 2027.
Scores usually arrive about two weeks after test day. Always confirm dates and deadlines on the College Board website.