**SAT MATH STRATEGY**

**1: Skip the Most Difficult Math Questions**

To score a 600, you only need a 38 out of 58.  **Completely skip the last 20% of questions in each subsection.**Don't even look at them, don't even read them. Instead, focus all your energy on getting the first 80% of questions correct. It gives you way more time on easy and medium difficulty questions - the questions you have a good chance of getting right. This works because, unlike Reading and Writing, **Math questions are ordered in difficulty**. The hardest questions are always the questions at the end of the subsection.

section by section, here's your skipping strategy:

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Subsection** | **Total Questions** | **Questions to Skip** |
| **Section 3** | Multiple Choice | 15 | 3 |
| Free Response | 5 | 1 |
| **Section 4** | Multiple Choice | 30 | 6 |
| Free Response | 8 | 2 |

**Important note: skipping does not mean LEAVING BLANK!**There is no guessing penalty on the SAT, so you MUST make sure you bubble in every single blank answer on your answer sheet before the section ends. Not doing so will cost you valuable points.

### Strategy 2: Find Your Math Weaknesses and Drill Them

Don’t waste time studying problems you already know how to do. Focus your study time on learning and practicing areas you have difficulty with. **Studying effectively for the SAT is like plugging up the holes of a leaky boat.** You need to find the biggest hole, and fill it. Then you find the next biggest hole, and you fix that. Soon you'll find that your boat isn't sinking at all.

A complete mapping of all 24 skills tested on SAT Math:

* **Basic Algebra**
  + Linear functions
  + Single variable equations
  + Systems of linear equations
  + Absolute value
* **Advanced Algebra**
  + Manipulating polynomials
  + Quadratic equations
  + Dividing polynomials
  + Exponential functions
  + Function notation
  + Solving exponential equations
  + Systems of equations with nonlinear equations
* **Problem Solving and Data Analysis**
  + Ratios and proportions
  + Scatterplots and graphs
  + Categorical data and probabilities
  + Experimental interpretation
  + Medan, median, mode, standard deviation
* **Additional Topics**
  + Coordinate geometry - lines and slopes
  + Coordinate geometry - nonlinear functions
  + Geometry - circles
  + Geometry - lines and angles
  + Geometry - solid geometry
  + Geometry - triangles and polygons
  + Trigonometry
  + Complex numbers

### Strategy 3: Focus On the Most Important Skills. Ignore the Rest

Of the 24 skills listed, some are tested more often than others. In fact, the most common skill (algebra - solving single variable equations) is **29 TIMES more likely to appear** than the least common skill (algebra - function notation).

|  |  |  |
| --- | --- | --- |
| **Skill** | **Frequency** | **# of Q's** |
| Solving single variable equations | 12.50% | 7 |
| Define and interpret linear function | 11.21% | 7 |
| Ratios and proportions | 10.78% | 6 |
| Solving systems of linear equations | 7.76% | 5 |
| Manipulating polynomials | 7.33% | 4 |
| Scatterplots and Graphs | 6.47% | 4 |
| Solving quadratic equations | 5.60% | 3 |
| Coordinate geometry of nonlinear functions | 4.74% | 3 |
| Exponential functions | 4.74% | 3 |
| **TOTAL** | **71.13%** | **42** |

**This is great news - with just 8 skills (33% of all 24 skills), you cover 71% of the test!**

Here are the **LEAST common skills** on SAT Math:

|  |  |  |
| --- | --- | --- |
| **Skill** | **Frequency** | **Expected Questions Per Test** |
| Dividing polynomials | 1.72% | 1 |
| Trigonometry, radians | 1.72% | 1 |
| Absolute value | 1.29% | 0.75 |
| Complex numbers | 1.29% | 0.75 |
| Experimental interpretation | 0.86% | 0.5 |
| Lines and angles | 0.86% | 0.5 |
| Solid geometry | 0.86% | 0.5 |
| Systems of equations with nonlinear equations | 0.86% | 0.5 |
| Function notation | 0.43% | 0.25 |
| **TOTAL** | **9.89%** | **5.75** |

Look at these 9 skills. Altogether, they add up to a measly 10% of the entire test.

Remember what % of the test you need to get right to get a 600? **It's 66%.**

If you completely ignored these 9 skills, you'd still be able to get a maximum score of 730.

### Strategy 4: Use Only Realistic, High Quality Sources

**The very, very best sources for SAT Math questions is the**[**Official SAT Tests**](https://blog.prepscholar.com/complete-official-sat-practice-tests-free-links)**.**

**Official SAT tests released by the College Board are the gold standard for SAT practice questions.** Each test released by the College Board contains real questions given to real students at previous administrations of the SAT. The quality of official questions is far better than questions written by unofficial sources like Kaplan and Barron's.

**all of the Official SAT Practice Tests**for the New SAT**are FREE**! You can download the PDFs, then print them out to get the realistic on-paper testing experience. <https://collegereadiness.collegeboard.org/sat/practice/full-length-practice-tests>

### Strategy 5: Understand All Your Math Mistakes

**If you don't understand exactly why you missed that question, you will make that mistake over and over again.**

**You don't want to be like these students. So here's what you need to do:**

* on every practice test or question set that you take, mark every question that you're even 20% unsure about
* when you grade your test or quiz, review every single question that you marked, and every incorrect question. This way even if you guessed a question correctly, you'll make sure to review it.
* in a notebook, write down the gist of the question, why you missed it, and what you'll do to avoid that mistake in the future. Have separate sections by subject and sub-topic (number theory - fractions, algebra - solving equations, etc.)

It's not enough to just think about it and move on. It's not enough to just read the answer explanation. You have to think hard about why you specifically failed on this question.

By taking this structured approach to your mistakes, you'll now have a running log of every question you missed, and your reflection on why.

What specifically did you miss, and what do you have to improve in the future?

### Strategy 6: Experiment with Different Strategies to Solve Math Problems

Sometimes, you get really stuck on a question. You just have no idea how to solve it, and the first step doesn't seem obvious.

When this happens, a really useful skill to learn is having a toolkit of alternative strategies to solve a question. Broadly speaking, there are two that will come up most often: [Plugging in Numbers](https://blog.prepscholar.com/plugging-in-numbers-sat-act-math-strategy), and [Plugging in Answers](https://blog.prepscholar.com/plugging-in-answers-a-critical-sat-math-act-math-strategy).

### Strategy 7: Monitor Your Time During the Math Section

Because many questions are difficult, it's easy to get sucked into a hard problem. This takes away time from other questions that you can solve and get points for.

There are two ways to ease time pressure for yourself. The first way is by getting better at the test. By doing more practice, you'll automatically get faster at solving each question. By learning patterns to what the SAT asks, more questions will just 'click' for you.

The other way is to **monitor the time you're spending on each question**. What you want to avoid is spending too much time on a single question, since this gives you less time for other math problems.

Remember: all points on the SAT are worth the same as each other. An easy question is worth 1 point, as is the most difficult question on the entire test.

So here's what I recommend:**if you spend 30 seconds on a problem and aren't clear how you can get to the answer, skip and go to the next question.**

If you finish the section early, you'll have time to get back to the questions you skipped. You'll especially have extra time if you follow my first skipping strategy (skip the most difficult questions).

Even if you don't have time to get back to the questions you skipped, you just bought yourself time to try a lot of other questions

### Strategy 8: Guess on Every Question You Don't Know

Starting in 2016, the **SAT no longer has a wrong answer penalty**.

Now, before you finish the section, **make sure every blank question has an answer filled in**. You do not want to look at your answer sheet and see any blank questions.

**For every question you're unsure about, make sure you guess as best you can.**If you can eliminate just one answer choice, that gives you a much better shot at getting it right. If you have no idea, just guess! You have a 25% chance of getting it right.

Source: <https://blog.prepscholar.com/how-to-improve-low-sat-math-scores-and-get-to-a-600>