

Resource Manual

Expert Tips for ACT Math



WINWARD
ACADEMY



Before reviewing specific tips for the ACT Math section, let's ensure you know the rules that apply to the entire test.

Never leave an answer choice blank. There is no penalty for a wrong answer, so you should always provide an answer, even if it's a guess.

When practicing, never leave a mistake behind. You'll repeat errors if you don't identify and learn from them, so you must understand the answer to every question you ever practice. The best way to make sure you actually know a concept is to teach it to someone else.

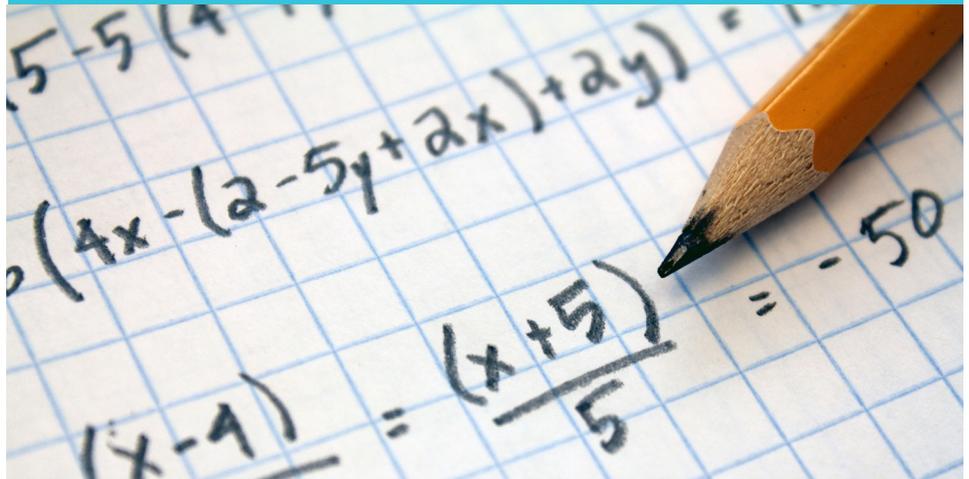
Never do a timed practice without a scantron. Yes, you have to practice bubbling. Many students make mistakes by filling in a different bubble than they intended or by skipping a line. Don't be one of them.

Format of the ACT Math Section

All questions are multiple choice (not grid-in questions like the SAT) and a calculator can be used during the entire section (also a key difference from the SAT).



10 Tips for the ACT Math



Questions: 60 Total



Time: 60 Minutes

(1 minute, on average, per question)

Now for the specific tips:

1. Answer the question being asked

This may sound silly, but if you don't read carefully, you might solve for x when in reality the question asks for $x+1$. This is a common trick on the ACT because it works on lots of students. If you get 5 for x , then 5 will be an answer choice even if the correct answer is 6 because you're supposed to add 1. Imagine doing the hard part right – solving for x – but then missing the question because you didn't read the directions carefully. Don't let that happen to you!

2. Know thyself

When it comes to math, you need to understand exactly where you need to focus your studying. Do a timed practice and an untimed practice. Is your issue accuracy or time? If it's accuracy, then drill down on which concepts you're struggling with most. If you're scoring well but you go over the time limit, then focus on time management.

3. There's no shame in using your calculator

Colleges don't know if you solved question 20 with a calculator or not. Even if you're doing $5+3$, if you're the type of person who might make a mistake when stressed or working quickly, use your calculator.

4. Avoid tough algebra

Use this strategy when you have variables in the answer choices. Remember, a variable just replaces a number, so instead of solving for n , m , or p , just make up numbers for those variables and solve the question. This strategy makes the math much more straightforward. Just avoid ever using 0 or 1 because they have special properties.

5. Mark questions when you're unsure

When you aren't confident about a difficult question, mark the question and come back to it. This practice allows you to use your time efficiently and focus on the easier, less time-consuming questions first and then go back to the harder ones. Remember, if there's a question you believe you have no shot of answering correctly, then just guess and move on.

6. Review algebra & geometry formulas

The ACT takes a "broad but shallow" approach to math and covers more topics but only the basic application of each, making this section blissfully predictable! They test the same concepts from algebra, geometry, algebra II, and arithmetic, so just put in the time to review the equations.

7. Know fundamentals

When's the last time you thought about prime numbers? So many students show up to the test thinking 1 is a prime number. It's not. Two is the smallest prime number. You must put in time to review these fundamental math concepts to make sure you're prepared for the math section.

8. Watch for unit swaps

This tip ties back into reading carefully. So many questions change units. They go from seconds to minutes, from inches to feet. Watch out so you don't get tricked.

9. Draw diagrams or label theirs

You don't have to solve the questions in your head. If a diagram is described, draw it. If you're given a diagram, label it. Use that information to visualize the problems.

10. Be honest about your math gaps

This tip is very important. You'll only grow in math if you know your knowledge gaps. The math section is hard; you have to know five years of equations and content to do well, so be honest with yourself about reviewing fundamentals, equations, and formulas and how to apply them.

As a final note, remember ACT Math questions increase in difficulty throughout the test with 1-20 being "easy," 21-40 as "medium," and 41-60 as "hard." All the questions are worth 1 point, so you want to maximize the number of points you get from the easy and medium questions.

The best way to improve on the ACT math is to practice both the content and the pacing. Students should be prepared to look at a question, recognize that it won't be a good use of time to solve, and guess immediately. And they should also be prepared to recognize difficult questions that test familiar concepts, in which case they should give it a try.