

## Test-taking Strategies for the ACT Mathematics Test

The Mathematics portion of the ACT, tests your ability to solve practical math problems and apply your reasoning skills. Math concepts are those typically covered by the end of 11<sup>th</sup> grade.

### General Things to Consider:

1. You will have 60 minutes to answer 60 questions but this does not work out to a minute a question as some questions will take less than a minute to solve and others will require more.
2. The ACT writers feel that the test goes from least difficult to most difficult.
3. However, only you know what kind of math problems are easiest and which are hardest for you. Make sure you solve all the problems that you can easily solve before spending time on the more difficult ones. You don't want to run out of time having not answered some of the questions that you actually know how to solve.
4. Especially when dealing with easier problems, use estimating as part of your process of elimination.
5. Don't fall for partial answers. Many of the problems on the math test will involve multiple steps. The test writers frequently include answers that represent "answers" that you would get if you didn't complete all of the steps of the problem. Don't fall for this. Make sure you have completed all of the steps required by the question before selecting the correct answer.
6. As is frequently the case when completing story problems, the questions on the ACT will sometimes contain information that really does not have anything to do with actually solving the problem. Don't let this extra information confuse you. If something appears to have nothing to do with solving the problem, then it likely doesn't.
7. Have an approved calculator with you; it will come in handy.

### Content Tips:

1. Make sure you are familiar with math terminology.
2. Know the rules of divisibility
3. Know the rules for multiplying and dividing exponents, raising a power to a power and expressing fractional and negative exponents.
4. Review basic mathematical principals like order of operations, fractions, decimals, ratios, percentages, averages.
5. You must know how to factor quadratic equations
6. Be comfortable working with angles, lines and triangles
7. Graphing on an (x,y) axis is the most useful way to estimate the correct answers to coordinate geometry questions.
8. Of the four trigonometry questions, at least two will deal with right triangles.

All information taken from:

Martz, Geoff, Kim Magliore, and Theodore Silver. Cracking the ACT 2007 Edition. New

York: Random House, 2007.

Stewart, Mark Allan. ACT Assessment for Brainiacs. Lawrenceville, NJ: Thomson

Peterson's, 2005.

