



# Math and Science Test Taking Tips

- ✓ **Translate problems into plain English.** Putting problems into words can help you understand them better. Put equations and formulas into words also. For example,  $c^2 = a^2 + b^2$  can be translated as “the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two sides.”
  - ✓ **Perform opposite operations.** If a problem involves multiplication, check your work by division. If a problem involves addition, check your work by subtraction. If a problem involves factors, check your work with multiplication. If a problem asks you to find the square root, check your work by finding the square.
  - ✓ **Use time drills.** Practice working problems quickly with a kitchen timer or stopwatch nearby. Exchange problems with a study partner and time each other. Keep reworking them until you can do them all quickly and correctly.
  - ✓ **Analyze before you compute.** Set up the problem before you start to solve it. When you’re working on a problem that is worth a lot of points, read it twice slowly, and make a list of the operations you may have to perform to solve it. When you take the time to analyze a problem carefully, you’re more likely to answer it correctly.
  - ✓ **Draw a picture.** When you get stuck, make it more real by drawing the problem out in a picture or diagram. Use different colors. Be patient and make your drawing as elaborate as the problem is.
  - ✓ **Estimate before you figure.** If you can study a problem and come up with a possible answer before actually answering it, you can often catch your own mistakes in computing the problem.
  - ✓ **Check your work systematically.** When you check your work, check it thoroughly. Ask yourself the following questions:
    - “Did I read the problem correctly?”
    - “Did I use the correct formula?”
    - “Is my arithmetic correct, even the simple addition and subtraction?”
    - “Is my answer in the proper form?”
    - “Does my answer make sense?”
    - “Are the units correct?”
    - “Is my answer consistent with the parameters of the question?”
- Unless you’re absolutely sure an answer is wrong, avoid the temptation to change it in the last few minutes of the test. When you feel rushed at the end of a test, it’s easy to come up with the wrong answer.
- ✓ **Review formulas.** Right before the test, review all of the formulas you’ll need to use. As soon as you get your test, (if your instructor allows it) write them down in the margins of your test or on the back of the test.