

# 6 Six Easy Steps to Improve Math Performance

**MAYBE IT'S NOT YOU.** Thirty-two percent of entering freshmen nationwide enrolled during the 2001–2002 and 2002–2003 academic years received either a grade of D or F in their first college-level math course (Cara Mia Pugh, Auburn University). We're aiming to improve those statistics at Baruch College.

**FOLLOW THESE GUIDELINES, SEEK OUT HELP, PRACTICE, AND YOU WILL CHANGE THE ODDS.**

## 1 Understand Why Students Struggle: Characteristics of College Math

- ▶ The curriculum progresses twice as fast as it does in high school.
- ▶ Most of the deep learning takes place outside of class.
- ▶ Math requires sequential skill learning.
- ▶ In addition to understanding the math, students must be able to complete assignments in a set time period.
- ▶ Students must demonstrate that they understand the concepts, not just mimic the problem solving.
- ▶ Math is a foreign language.
- ▶ Each instructor teaches differently and does not always consider how students learn best.

- ▶ Students need to apply various learning styles (see below) as they study math.



Go to [www.vark-learn.com](http://www.vark-learn.com) to become familiar with the various learning styles that may be applied to your course work.

## 2 First Things First: Take a Math Study Skills Evaluation

- ▶ To determine your strengths and weaknesses in mathematics, go to [www.academicssuccess.com/stdyskls/index.php](http://www.academicssuccess.com/stdyskls/index.php).
- ▶ To learn about your results, go to SACC to meet with a math study skills consultant, who will show you how to improve your habits.

## 3 Take Effective Notes: Here's How

- ▶ Divide your page into three.
- ▶ Record keywords/concepts in the left column.
- ▶ Record examples of each problem in the middle column.
- ▶ Record explanation/rules—the reasons for each step—in the right column.

### Sample Note Page

KEYWORDS	EXAMPLES	EXPLANATION
Integers	-2, -1, 0, 1, 2	Positive and negative counting
Rational Numbers	$\frac{2}{3}$ , $\frac{3}{8}$ , $-\frac{5}{6}$	A quotient of two integers

- ▶ Cover up the examples and explanation sections and recite out loud the meaning of the keywords/concepts.
- ▶ Place a check by the keywords/concepts that you didn't know.
- ▶ Review the information that you put a check by until it is understood.
- ▶ Develop a mathematics glossary for difficult-to-remember keywords/concepts.

## 4 Ten Steps for Completing Math Homework

- ▶ Review related textbook material.
- ▶ Review appropriate lecture notes.
- ▶ Do homework neatly.
- ▶ Write down every step of the problem.
- ▶ Understand the reasons for those steps.
- ▶ For difficult problems, repeat the steps above and review similar problems. Or call another student, see a tutor or teacher, or start a study group.



Interested in starting a study group? Go to [www.baruch.cuny.edu/sacc/collaborative.htm](http://www.baruch.cuny.edu/sacc/collaborative.htm) to learn how.

- ▶ Always finish by working problems successfully.
- ▶ Recall or write down important concepts.
- ▶ Make up note cards for difficult concepts.
- ▶ Don't get behind in your homework!

(continued)