

## Build Math Success

### Foundations of Learning Math

You will be using math applications all through your professional life. Math requires your clear understanding of basic principles and then building on those principles in a step by step manner. It is also a language with its own writing and symbols that are different from any other language. Not understanding math immediately is normal for most learners.

### Reducing Math Anxiety

Everyone can learn math! Math is used in all occupations and is an integral part of modern life. You are already familiar with, and using, math concepts day to day. Your math classes will help you recognize how you currently do math, help you learn new concepts, and strengthen your ability to do math in the future.

Also, being part of a study group can help you with your math skills and also make you more aware that you are not the only one who has to work hard to learn. Explaining how you got an answer is a powerful way to understand your own thinking and how you are learning.

### Approaching Math Positively

Your attitude affects everything. Begin with a positive outlook and a plan to be serious about your math studies. Take a broad overview of what you are going to learn in your course and break it down into sections. This may be done for you through the course syllabus or by the chapters in your text. By 'chunking' the materials into short pieces, it becomes more manageable. Use a semester schedule to lay out what you are doing each week. Math skills build, and the skills you learn will be used in various situations.

### Study Strategies for Math Success

- **Time on Task:** For every hour in class, plan to spend at least three hours outside of class on reading and practising solving the problems. This should be scheduled as an amount of time every day to help you reinforce your math memory.
- **Organization of Materials:** Have a math binder in which you do your problems and make notes on your methods. This will make it easy to review concepts before moving to new ones.
- **Preparation:** Pre-read the material before going to class.
- **Practise:** Try out the sample questions so the process makes sense to you. Try substituting numbers to see how the equations continue to work. Math is very precise so you must be precise, too.
- **Summarize** concept and procedures, step by step, in your binder or on flash cards. This is a new language that you are learning, and it will take practise to become fluent. This will help when you are working on problems and when you review.
- **Review** previous concepts before starting new ones. Math concepts are cumulative.
- **Attend** every class for the entire time. While you are there, take notes from each example that the instructor works through. Ask questions when you get lost.
- **Utilize** any extra class or study time that is offered. Visit your instructor during office hours.
- **Complete** all of the problems in each chapter. Most math books have answers for some questions at the back (often all the odd questions), and there may be a student solution's manual available, where all the problems are worked in detail. Use them!
- **Analyze** your test results to see where you could use more study time. Do all available quizzes.
- When you get stuck on a concept, look for **other examples** in a different textbook or online.

**Most importantly,** build on your successes and keep moving forward.