Math is not about memorizing formulas and/or crunching numbers; rather it is about learning and understanding (i) definitions, (ii) theorems, (iii) techniques, (iv) notation, and making connections between these four concepts. To do this effectively, here are some suggestions in random order. This is also not an exhaustive list.

1. **Actively attend lectures**. Come to class prepared by leaving distractions outside of the classroom. Dedicate the lecture time to focusing on the material being taught by genuinely listening and writing down lectures notes (and enhancing them by adding personalized comments, using coloured pens, etc.), and engaging in class discussions.

2. **Study outside of class regularly and actively**. For every one hour of lectures, students should be spending at least one hour outside of class time studying. Examples of study activities are: formulating questions and answers about the material, working on exercise problems or summarizing lectures notes. These study activities can be done on your own or within groups.

3. **Form study groups**. Get together with reliable classmates to talk about the concepts learned in class and practice assigned exercise problems together. What one person doesn't understand, another may be able to teach.

4. **Practice writing math**. Your knowledge of math is primarily tested in writing so practice writing math constantly and continuously by writing out full solutions to assigned exercise problems. Read these solutions a week later to see if they still make sense to you.

5. **Budget your time**. It takes time, patience and determination to learn math. Cramming the wealth of knowledge taught over several weeks into one or two days is not possible; rather create a realistic weekly schedule for your school work including study time for math and stick to it. Of course increasing studying time prior to a test will be needed.

6. **Identify misconceptions**. It is *not* enough to just do exercise problems; rather first genuinely understand the concepts taught in lectures, and then test whether you truly understand these concepts by completing assigned exercise problems. This may reveal things you thought were true that are actually false, which will then require you revisit your notes or textbook for clarification.

7. **Learn from past mistakes**. Some students who are taking a course for the second time believe they need to put in less effort the second time around. This is absolutely *not* true, rather when taking a course for the second time, double the effort is needed. In addition, redoing tests and assigned exercise problems and reviewing lecture notes will highlight what you know well, what you know only so-so and what you know poorly.

8. **Connect math to what you know**. Many mathematical concepts are inspired by the world we live. One way to learn math is to make analogies. For example, thinking of one-sided and two-sided limits as one-way and two-way streets may better help you recall the concept of limits.

9. **Seek help.** Don't give up when you don't know the answer, but rather dedicate some time in figuring it out on your own. If you have done this and remain confused, seek help by visiting your instructor's office hours, asking your study group, visiting the math/stats lab (mathstats.info.yorku.ca/our-programs/need-help/) or attending one of Bethune College's help sessions (bethune.yorku.ca).

All the best with your efforts learning math!