Math Information Sheet

Mr. Brian Taylor
E-mail: **taylor@lfabc.org**

Detailed homework outlines (for Math 10 & 11), detailed solutions, TI-83 programs, interactive geometry demonstrations and lots of interesting links can be found at the following page:

http://www.briantaylor.ca/lfamath.html

What is my homework policy?

Students always know what homework I expect them to do. I post a detailed homework outline for the entire course (Math 10 & 11) at the beginning of the year. Students can view it online or print a copy for themselves. I only give a small mark for homework assignments and I only check each student's homework a few times per year. I want students to develop the self-discipline necessary to succeed at university. I try to give frequent quizzes so that students get feedback and so that I can identify students who are in need of extra help.

How can a student who is struggling get better?

It's usually a question of time. Results in math are closely linked to the amount of time a student is willing to put into studying. The key is to make sure that the student does not get too frustrated. Frustration will result in the student giving up, or spending time elsewhere. I recommend that students spend *at least* as much time working on math at home as they do at school – three hours most weeks. Ideally this should be done on a regular schedule, with each session lasting only about thirty minutes. That way the student's concentration level stays high and frustration hopefully stays low.

Tutors can serve as an aid to understanding, but the real work still must be done by the student. Having a tutor can serve as a type of forced discipline, but unless the tutor is visiting a few times per week, the student still must do regular review on their own.

How can any student, especially one who is doing well, do even better?

I highly recommend working on math contest problems and other similar enrichment problems. Working on these problems develops areas of the brain that are required for problem solving. By looking at challenging problems, time is spent modeling the problem and exploring alternative or unusual solutions. I try to spend some class time preparing students for math contests.

Three overlooked keys to success:

- Sleep – lack of sleep hinders memory and learning
- Exercise – helps sleep, and aids in neural growth
- "Mindset" – see over

More questions? The best way to get hold of me is by e-mail at: taylor@lfabc.org

Thanks for coming to parent-teacher interviews!

Reading suggestions

Mindset: The New Psychology of Success by Carol Dweck

> This is an excellent book and an easy read. It really helps explain why people react so differently to setbacks and challenges. By changing from a "fixed mindset" to a "growth mindset" students will not give up when they encounter setbacks. Instead they will be invigorated by the challenges ahead.
>
> Carol Dweck is a psychologist at Columbia University.

Learned Optimism: How to Change Your Mind and Your Life by Martin E. Seligman

> This book is a ground-breaking description of how our "explanatory styles" affect our lives. An "explanatory style" is the term used to describe the way we explain events that happen to us. The style has three dimensions: personalization, pervasiveness and permanence. The book outlines both an optimistic and pessimistic explanatory style and explains how the different styles affect our behaviour.
>
> Martin Seligman is a psychologist at the University of Pennsylvania.