Graduation from secondary school requires the successful completion of at least three (3) courses in mathematics (with at least one of these at the Grade 11 or 12 level). Further mathematics courses may be—but are not necessarily—required by universities and colleges for admission. It is important that you discuss your choices with your secondary school's Guidance Counsellor.

It is recommended that _____ take:
(name of student)

❑ Grade 9 Academic (MPM1D).
Please see description on page 2 of this brochure.

❑ Grade 9 Applied (MFM1P).
Please see description on page 3 of this brochure.

❑ Grade 9 LDCC (MAT1L).
Please see description on page 4 of this brochure.

Notes:

A *NorthWest One* brochure, designed to facilitate wise choices

Websites for Parents, Guardians, and Caregivers

The Math Forum @ Drexel. <mathforum.org>.
This site has lots of activities and ideas for learning mathematics. It also includes resources for teachers, parents/guardians/caregivers, and students.

"nrich." *University of Cambridge*. <nrich.maths.org>.
This site provides many rich learning tasks. It also offers a student site that poses weekly questions and contests. (Solutions are posted the following week.)

Ontario Ministry of Education: Learning in Ontario.
<www.edu.gov.on.ca/eng>.
This site provides information about Ontario's curriculum, colleges, universities, apprenticeships, and secondary schools.

Toronto District School Board. <www.tdsb.on.ca>.

TVOntario: Independent Learning Centre (ILC).
<www.ilc.org/cfmx/AAT/AboutAAT/>.
Ask a Teacher (for Grade 9 students) and *Career Matters* (for planning a career).

Helping Students at Home

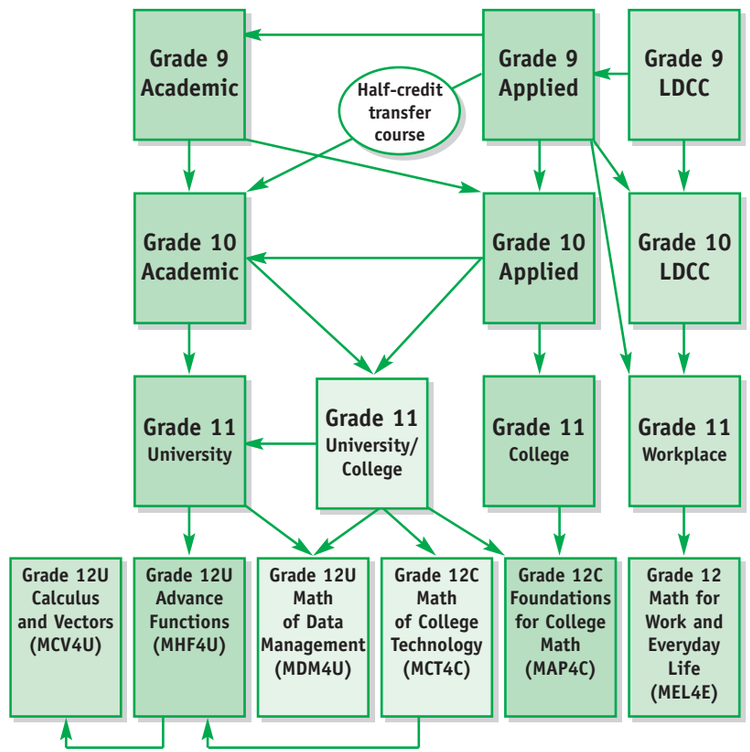
The following list offers suggestions for helping students at home. As a parent, guardian, or caregiver, you can provide a positive learning environment by:

- ☑ celebrating a good effort
- ☑ staying in touch with the teacher(s)
- ☑ not giving the answers (Ask good questions instead!)
- ☑ helping with the development of time-management skills
- ☑ turning off the television and other e-entertainment
- ☑ creating a quiet time for homework
- ☑ providing a desk or table that is just for homework
- ☑ encouraging the use of an agenda or homework book
- ☑ taking an interest in your child's homework and assignments

Toronto District School Board

Examining Mathematics Pathways

Making Choices for Grade 9 and Beyond



Too many students enroll in a Grade 9 Mathematics course that does not align with their skills and understandings. This brochure is designed to help families make wise and informed decisions about the Grade 9 Mathematics course selection and to help families recognize that each Grade 9 Mathematics course has its own distinct advantages.

Developed by the North West 1 Family of Schools
with support from the Mathematics and Numeracy Program Department

Information about Grade 9 Academic (MPM1D)

Work Expectations:
Students are expected to actively participate in class discussions and classroom work.

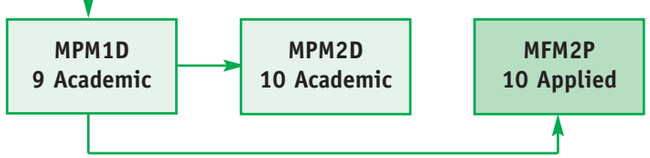
Students will be expected to complete approximately 3 hours of homework each week.

Who should consider taking the Grade 9 Academic course?

- Students achieving approximately 65% or more in Grade 8 Mathematics

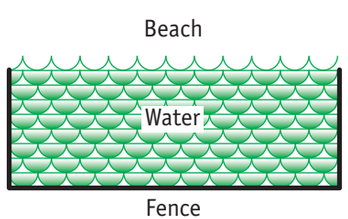
Because of the fast pace of this academic course, students require a solid mathematical understanding across all strands of the curriculum.

Note: *Students with additional learning needs, such as those for whom English is a second language (ESL), will receive the necessary support.*



Sample Grade 9 Academic Question:

The swimming area at a Toronto beach is to be roped off with 100 m of rope. What is the largest rectangular area that can be created for swimming?



The largest rectangular swimming area will have an area of 1250 m² (with a width of 25 m and a length of 50 m).

Information about Grade 9 Applied (MFM1P)

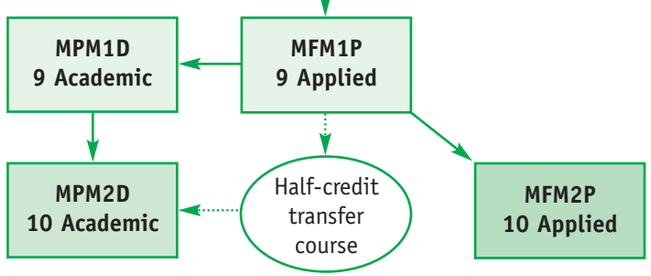
Work Expectations:
Students are expected to actively participate in class discussions and classroom work. Students may be asked to complete additional homework.

Who should consider taking Grade 9 Applied?

- Students who are more concrete in their thinking
- Students who have achieved Grade 8 Mathematics marks in the 50% to 65% range

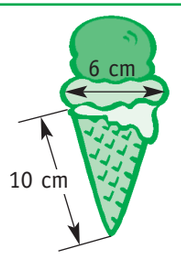
Students may transfer into the Grade 10 Academic course by taking a half-credit course after taking Grade 9 Applied.

Note: *Students with additional learning needs, such as those for whom English is a second language (ESL), will receive the necessary support.*



Sample Grade 9 Applied Question:

The diameter of an ice-cream cone is 6 cm and the slant height is 10 cm. What volume of ice cream would fit inside the cone?



24 π cm³ of ice cream will fit inside the cone (approximately 75 cm³).

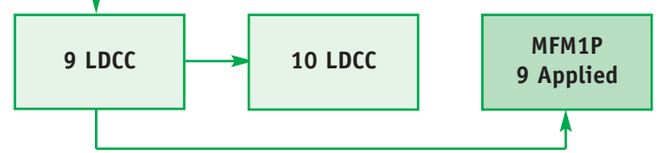
Information about Grade 9 LDCC (MAT1L)

Work Expectations:
Students are expected to actively participate in class discussions and complete assigned work

Who should consider taking Grade 9 LDCC?

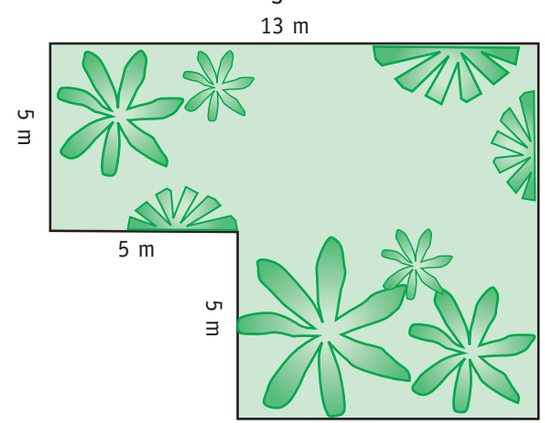
- Students transferred to Grade 9
- Students with gaps in their knowledge of mathematics

Note: *A student can acquire two math credits by taking Grade 9 Applied Mathematics after taking Grade 9 LDCC.*



Sample Grade 9 LDCC (MAT1L) Question:

What is the area of this garden?



The area of the garden is 105 m².