

Queen Margaret College
Level 2 Mathematics with Calculus Programme 2019
Level 7 of the New Zealand Curriculum

Standard Number	Achievement Standard Title	Credits	Internal / External	Proposed assessment date
AS91267, 2.12	Apply probability methods in solving problems.	4	External	Term 1, Week 7
AS91261, 2.6	Apply algebraic methods in solving problems.	4	External	Term 2, Week 2
AS91259, 2.4	Apply trigonometry relationships in solving problems.	3	Internal	Term 2, Week 7
AS91262, 2.7	Apply calculus methods in solving problems.	5	External	Term 3, Week 3
AS91264, 2.9	Use statistical methods to make an inference.	4	Internal	Term 3, Week 9

Course details

This course requires students to thinking mathematically and statistically in a range of contexts. Topics include algebra, calculus, statistical inferences, trigonometry, and probability. Concepts covered at Level 1 will also be extended to develop mathematical knowledge and understanding. Calculus and higher-level algebra are introduced for the first time.

Assessment Information

EXTENAL ASSESSMENTS:

- At the end of each topic students sit a practice assessment similar to the external assessment.
- Students will also sit practice examinations for each external Achievement Standard during the QMC school examinations in the third term.

INTENAL ASSESSMENTS

- During the teaching of each topic, practice assessment tasks will be given to prepare the students for the final task.
- If a student is absent from the internal assessment, they must follow the school policy on absences for NCEA assessments.

Course Information

- The *Mathematics Club* students is staffed by teachers every week, usually one at lunchtime and one after school. Students can attend to do their homework or receive some extra help.
- Some more able students will have the opportunity to participate in competitions:
 - ✓ The *Australian Mathematics Competition* is held in August (entry fee approximately \$6.50).
 - ✓ The *Senior Mathematics Competition* is held in May (entry fee approximately \$5).
- All students are registered with the Education Perfect software for Mathematics (approximate cost \$20).
- Students must have a graphing calculator, preferably a Casio FX9750GII.

Homework expectations

To be successful with Level 2 Mathematics, students should make full use of class time and do regular study each day. All students will be issued with individual workbooks (approximate cost \$30).

Your daughter should be learning at home for a total of at least 15 hours per week, across all subjects.

To achieve at a high level in this subject, students are expected to complete some homework during the week. Homework might include:

- Revision of daily/weekly content covered in class.
- Reading of text or reference material.
- Reinforcement of skills.
- Reflection of lessons and/or tasks.
- Preparation/revision for assessments.
- Completion of assignments.