MATHEMATICS

Mathematics at Aquinas is fun and fulfilling and is inclusive of the learning needs of all students. The study of the student enables students to develop a positive self-concept as learners of mathematics, obtain enjoyment from mathematics, and become independent learners through inquiry and active participation in challenging and engaging experiences.

All classes are streamed to allow teachers to cater for diverse learning needs and target their lessons at the best level for the students in their class. The classes for those students who may find mathematics challenging are a little smaller and extra support is provided. Teachers are also always willing to provide out-of-class assistance when need. Students who are gifted in mathematics are exposed to external competitions such as the Australian Mathematics Challenge, a problem solving activity that takes place over three weeks. The World of Maths also visits Aquinas College providing fun and academic challenge for the students.

Course Description

Mathematics is used to identify, describe and apply patterns and relationships. It provides a precise means of communication and is a powerful tool for solving problems both within and beyond mathematics. In addition to its practical applications, the study of mathematics is a valuable pursuit in its own right, providing opportunities for originality, challenge and leisure.

The aim of Mathematics in K–10 is to develop students' mathematical thinking, understanding, competence and confidence in the application of mathematics, their creativity, enjoyment and appreciation of the subject, and their engagement in lifelong learning.

What will students learn about?

Students study Number and Algebra Measurement and Geometry, Statistics and Probability. Within each of these strands they will cover a range of topics including:

- fractions	- decimals	- percentages	- financial mathematics
- probability	- algebraic techniques	- coordinate geometry	- graphing and interpreting data
- perimeter	- area	- trigonometry	- surface area and volume
- properties of solids	- geometrical figures	- deductive geometry	

What will students learn to do?
Students will:

- learn to ask questions in relation to mathematical situations and their mathematical experiences;
- develop, select and use a range of strategies, including the use of technology, to explore and solve problems;
- develop and use language and representations to communicate mathematical ideas;
- develop and use processes for exploring relationships;
- make connections with their existing knowledge and with the use of mathematics in the real world.

Technology in Mathematics

Students at Aquinas will use a variety of technologies from scientific calculators to spreadsheets and specialist graphing of software such as Desmos and Geogebra. The use of these technologies will allow students to make conjectures and explore mathematical concepts in a way that will prepare them for our rapidly changing world.

Enlivened by the Spirit

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