

UNIT 1 & 2 GENERAL MATHEMATICS

General Mathematics is intended to provide for students with diverse needs and aspirations and is intended to be widely accessible. It is intended to provide general preparation for employment and further study in a variety of different fields.

UNIT 1

Students will investigate and compare data distributions and discuss how to display and interpret categorical and numerical data distributions using summary statistics. They will cover continuous models involving linear relations and their graphs and construct linear models to represent practical situations. The representation and manipulation of linear relations and equations will be investigated including simultaneous linear equations, and their applications in a range of contexts. Students will cover mental, by-hand and technology assisted computation with rational numbers and practical arithmetic. Number patterns and recursion is investigated and their use to model practical situations and solve a range of related problems is discussed.

AREA OF STUDY

- Data analysis, probability and statistics
- Algebra, number and structure
- Functions, relations and graphs
- Discrete mathematics

OUTCOMES

Outcome 1: Define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

Outcome 2: Apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

Outcome 3: Apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.

UNIT 2

Students will cover representing, analysing and investigating relationships between two numerical variables, including an introduction to correlation. This will involve students investigating the relationships between two numerical variables and the use of models to make predictions and identify limitations of extrapolation. In this unit students will cover financial arithmetic including investigating percentage increase and decrease applied to various financial contexts and applications of simple and compound interest. Students will investigate matrices as well as graphs and networks, discuss their use in modelling practical situations, and solve a range of related problems.

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