Assessment Specifications

Level 2 Mathematics and Statistics 2024

Published in December 2023

General information

Domain: Mathematics and Statistics

Assessment method: Examination

Assessment medium: Printed paper

Standards: 91261, 91262, 91267

Mathematics and Statistics subject page

National secondary examinations timetable

Information relating to all achievement standards

Each examination will contain resource-based and knowledge-based questions.

Each examination will be made up of three questions made up of multiple parts that may require candidates to process word problems.

Teachers should be familiar with the two documents listed below:

- TLG changes for NZAMT JANUARY 2019 – Google Sheets
- Unpacking the standards level 2 – Google Docs

Equipment required

Candidates must bring an approved calculator.

Specific information for individual achievement standards

Standard: 91261

Domain: Algebra

Title: Apply algebraic methods in solving problems

Version: 3

Number of credits: 4

Any equations formed must be stated as part of solving a problem.

Algebraic techniques must be shown, as opposed to simply providing the correct answer.

Answers should be expressed in their simplest algebraic form.

Given the form of a model, candidates may be required to complete the model using the information given in the context of the question.

Candidates should be familiar with common 2D and 3D shapes and their associated formulae to be able to apply them to solve problems.

Candidates may be required to:

- form and solve exponential equations relating to compound interest, growth and decay, etc
- understand the meaning of rational (fractional) numbers in regards to the roots of equations.

Standard:	91262
Domain:	Calculus
Title:	Apply calculus methods in solving problems
Version:	3
Number of credits:	5

Candidates should be familiar with common 2D and 3D shapes and their associated formulae to be able to apply them to solve problems.

Candidates may be required to:

- draw the graph of the gradient of a function having been given the graph of the function, or vice versa
- justify the nature of the maximum or minimum points, e.g. by using the shape of curve, by using the second derivative, or by testing points
- form polynomials from a variety of contexts.

Standard:	91267
Domain:	Probability
Title:	Apply probability methods in solving problems
Version:	3
Number of credits:	4

Probabilities may be expected to be calculated from one or more tables, written information, or a probability tree.

All working should be given to a minimum of three decimal places throughout the working of a question.

Candidates may be required to:

- create a probability tree from written information
- describe and compare distributions (from given statistics or graphs), answers should include reference to the shape, centre and spread of the data. Numerical justification may be required
- calculate and interpret relative risks, both above and below a relative risk of 1.