Assessment Specifications

Level 1 Mathematics and Statistics 2024

Published in March 2024

General information

Domain: Mathematics and Statistics

Standards: 91946, 91947

Mathematics and Statistics subject page

National secondary examinations timetable

Information relating to all achievement standards

Candidates will be expected to demonstrate an understanding of the mathematical concepts, rather than directly transferring results from a graphing calculator. This may involve increased use of unknown constants.

Equipment required

Candidates must bring a ruler and an approved calculator.

Specific information for individual achievement standards

Standard:	91946
Domain:	Mathematics and Statistics
Title:	Interpret and apply mathematical and statistical information in context.
Version:	3
Number of credits:	5
Assessment format:	Response to Stimulus
Assessment medium:	Digital submission
Permitted file types:	Document file (PDF, DOC, DOCX)
Date for pre-release of material:	Resource Booklet released Term 3, Week 1
Final date of submission:	30 October 2024

Candidates will be required to produce an analytical report that demonstrates interpretation and application of mathematical and statistical information in context.

The report will respond to an assessment activity provided by NZQA.

The assessment will consist of a resource booklet and a range of prompts. The Resource Booklet will comprise a diverse range of data representations, which may include infographics, displays, and media articles. Prompts will relate to the data presented in the resource booklet and will focus on:

- identifying information
- relating findings to evidence presented
- critically engaging with the quality, validity, limitations, or considerations of the information presented.

The Resource Booklet should be made available to all candidates at the beginning of Term 3 to allow sufficient time for candidates to familiarise themselves with the context.

The prompts (questions) should not be made available until candidates begin the assessment.

Candidates must demonstrate contextualised mathematical and statistical literacy in all responses. Candidate responses may additionally be informed by contextual knowledge or personal worldviews.

It is recommended that candidates will have three hours to individually produce their report. Schools can decide when this time is to be made available to candidates. Once the report is handed in to the teacher, candidates may not have any further access to their report.

Candidates are encouraged to write no more than 1200 words in total.

Conditions of assessment

Candidates may not bring into the assessment any materials other than the Resource Booklet.

The use of chatbots, generative AI, paraphrasing tools, or other tools that can automatically generate content is not permitted and material generated by these tools should not be submitted as part of the candidate's work.

Authenticity

Teachers must closely supervise the process of evidence collection to ensure that candidates:

- do not copy from another person or source without appropriate acknowledgement
- do not receive guidance, scaffolding, instruction, assistance, or assessment conditions beyond what is specified as permissible in these Assessment Specifications.

Where a teacher cannot verify that the assessment submitted is the authentic work of the candidate, they must notify NZQA of a possible Candidate Breach of External Assessment.

Special Assessment Conditions

Refer to the NZQA website for further information.

Aromatawai Special Assessment Conditions

Submission requirements

Evidence may be submitted as one document file (PDF, DOC, DOCX)

Candidates should refer to Further Guidance for Submission Responses for further information.

Refer also to other resources on the subject page of the NZQA website.

Standard:	91947
Domain:	Mathematics and Statistics
Title:	Demonstrate mathematical reasoning
Version:	2
Number of credits:	5
Assessment timing:	Point-in-time end of year
Assessment method:	Examination
Assessment medium:	Printed paper

The examination will be made up of three questions. Candidates will be given several problems, and will be required to explain with mathematical reasoning how to work through them.

A formula sheet will be provided.

The questions will be drawn from the following aspects of number, algebra, measurement, and geometry and space:

Number and Algebra

- manipulating and simplifying expressions
- generalising properties of numbers and operations
- inequations
- linear and quadratic equations
- simultaneous linear equations with two unknowns
- optimal solutions
- relate graphs, tables, equations, and patterns
- relate rate of change to the gradient of a graph

Measurement, and Geometry and Space

- Pythagoras' theorem in right-angled triangles in 2D and 3D situations
- trigonometric ratios in right-angled triangles in 2D and 3D situations
- properties of similar shapes
- surface area of prisms, pyramids, cones, and spheres
- volume of pyramids, cones, spheres, and composite shapes including prisms.