Assessment Specifications

Level 3 Statistics 2025

Published in October 2024

General information

Domain: Statistics and Probability

Standards: 91584, 91585, 91586

Assessment method: Examination, end of year

Assessment medium: Printed paper

Mathematics and Statistics subject page

National secondary examinations timetable

Information relating to all achievement standards

Unless a method is specified within a question, candidates may choose their method when solving a problem, but guess-and-check methods are unlikely to show the required thinking.

Equipment required

Candidates must bring an approved calculator (preferably a graphing calculator). Candidates who do not have access to graphing calculators will be disadvantaged.

Resources or information supplied

A Formulae and Tables Booklet will be provided.

Special notes

Solutions for problems may also require knowledge up to and including Statistics Curriculum Level 7.

Questions will be set in real-life contexts.

Questions may require candidates to interpret their solutions in context.

Candidates will be required to demonstrate an understanding of the statistical concepts.

Minor errors will not be penalised. Rounding in context may be required.

Sensible rounding is expected. Early rounding may be penalised.

Special assessment conditions

Refer to the NZQA website for further information:

[Aromatawai special assessment conditions](#)

Specific information for individual achievement standards

Standard:	91584
Title:	Evaluate statiscally based reports
Version:	2
Number of credits:	4

Candidates will need to answer questions about statistically based reports. The questions will require candidates to evaluate claims or conclusions made in the report. For example, this could involve:

• identifying and discussing potential sources of error associated with statistical studies

• calculating and interpreting margins of error

• considering study design and the type of inference.

Candidates should recall and use the "rules of thumb" based on $\frac{1}{\sqrt{n}}$ for margin of error.

Candidates will be provided with a resource booklet and a question-and-answer booklet.

Reports will be set in real-life contexts.

Standard:	91585
Title:	Apply probability concepts in solving problems
Version:	2
Number of credits:	4
Assessment method:	Examination, end of year

Probabilities may be expected to be calculated from formulae, a probability distribution table or graph, tables or visual representations of counts or proportions, simulation results, or from written information.

Candidates should clearly show the method they have used to calculate probabilities and state assumptions made.

Standard:	91586
Title:	Apply probability distributions in solving problems
Version:	2
Number of credits:	4
Assessment method:	Examination, end of year
Assessment medium:	Printed paper

Candidates should clearly identify the probability distribution applied in solving the problem and state assumptions made.

Probabilities may be expected to be calculated from distributions presented as formulae, tables or graphs of data, simulation results, or written information.

Candidates will need to be familiar with the normal, Poisson, binomial, uniform, and triangular distributions. Page 3 of 3 Assessment Specifications – Level 3 Statistics 2024.

Candidates may be expected to calculate or estimate the mean and standard deviation of a random variable.