

# Assessment Specifications

## Level 3 Statistics 2024

Published in December 2023

### General information

**Domain:** Statistics and Probability

**Assessment method:** Examination

**Assessment medium:** Printed paper

**Standards:** 91584, 91585, 91586

[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.

## Specific information for individual achievement standards

<b>Standard:</b>	91584
<b>Title:</b>	Evaluate statistically based reports
<b>Version:</b>	2
<b>Number of credits:</b>	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.

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<b>Standard:</b>	91585
<b>Title:</b>	Apply probability concepts in solving problems
<b>Version:</b>	2
<b>Number of credits:</b>	4

Probabilities may be expected to be calculated from formulae, a probability distribution table or graph, tables 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.

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<b>Standard:</b>	91586
<b>Title:</b>	Apply probability distributions in solving problems
<b>Version:</b>	2
<b>Number of credits:</b>	4

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.

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