Assessment Specifications

General information

Subject	Mathematics and Statistics
Level	2
Mode of Assessment	Written Examination
For Year	2014
Standards	91261, 91262, 91267

Format for the assessment

Questions may have multiple parts. The parts of a question may be linked. There may be scaffolding within the question.

Opportunities for Merit and Excellence will be spread through the paper.

As a result, question parts may not be arranged in order of increasing difficulty.

Correct answers only may not be sufficient for showing evidence of the level of thinking required by the standard.

Unless a method is specified within a question, candidates may choose their method when solving a problem, although the grade awarded may be affected by the level of thinking applied in solving the problem. Guess-and-check methods are unlikely to show the required thinking.

Candidates must show any working that is asked for in the assessment eg derivatives, anti-derivatives, and equations.

In algebra standards, answers should be expressed in their simplest form.

Standards require a range of concepts that may be assessed within an assessment.

Valid assessment may involve a selection of these concepts.

Equipment to bring

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

Resources or information provided

A Level 2 Mathematics Formulae Sheet will be provided.

Content / context details

Solutions for problems may also require knowledge up to and including Mathematics Curriculum Level 6, and for higher levels of achievement may incorporate content knowledge across different Level 2 Mathematics achievement standards in order to solve a problem.

Questions may be set in a mathematical context.

Questions may require candidates to interpret their solutions in context.

Special notes

Candidates will be expected to answer questions that demonstrate an understanding of the mathematical concepts.

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

Knowledge of mathematical terms such as indices, exponents, and the like is assumed.

The answer from one question part may be required in answering subsequent parts. In this case, consistency of response will be assessed as being correct, provided the solution is not an essential component of the standard and providing the incorrect solution does not result in an easier question to be solved.

Specific information for individual external achievement standards

Standard 91261

Domain Algebra

Title Apply algebraic methods in solving problems

Version 1

Number of Credits 4

Further clarification of the achievement standard

Any equations formed by the candidate must be stated in solving a problem.

Candidates must demonstrate algebraic techniques rather than provide only the correct answer.

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

Answers should be expressed in their simplest algebraic form.

Standard 91262

Domain Calculus

Title Apply calculus methods in solving problems

Version 1

Number of Credits 5

Content / context details

Derivatives and anti-derivatives must be shown.

Candidates will be required to use the derivatives and anti-derivatives that they have found.

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.

Candidates may be required to understand the term “general equation of a function”.

Answers should be expressed in their simplest algebraic form.

Candidates are required to justify the nature of the maximum or minimum points.

Standard	91267
Domain	Probability
Title	Apply probability methods in solving problems
Version	1
Number of Credits	4

Further clarification of the achievement standard

Normal distribution tables will be provided in the formula sheet; however, appropriate use of a calculator will be acceptable.

Questions may require knowledge of inverse normal calculations.

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

Standards require a range of concepts that may be assessed within an assessment.

Valid assessment may involve a selection of these concepts.