

APPLICATIONS OF MATHEMATICS 12

DESCRIPTION OF THE PROVINCIAL EXAMINATION

The Table of Specifications outlines the curriculum organizers, sub-organizers, and the cognitive level emphases covered on the provincial examination. A detailed description of examinable material within each curriculum organizer will be found in the *Applications of Mathematics 10 to 12: Integrated Resource Package 2006*.

The provincial examination is divided into **two** parts:

PART A: Multiple-choice questions worth **73%** of the examination (44 questions worth 1.5 marks each to give 66 marks).

Multiple-choice questions efficiently provide valid and useful information about a variety of learning outcomes. However, they are answer dependent; that is, students must select the correct answer to receive full credit for the question. There is no opportunity for part marks in a multiple-choice question.

PART B: Written-response questions worth **27%** of the examination (24 marks).

The **number** of written-response questions may vary from one examination to the next, depending on the value of each question; however, the total **marks** for the written-response questions will remain the same.

It is essential that students know what quality of response is expected on written-response questions and how they are evaluated on such questions. The intent of the written-response section of the provincial examination is to test logical mathematical development of a solution.

1. Students are expected to communicate their knowledge and understanding of mathematical concepts in a clear and logical manner in all questions. The use of a graphing calculator will affect the way some of the questions are asked and the way students will be expected to answer them. In some cases, a particular method of solution will be requested; in other cases, alternate methods of solution will be accepted. In all cases, students will be expected to show their work and indicate their method of solution or give justification for their written-response answers. Full marks **will not** be awarded for a correct final answer without evidence of the process used to derive that answer.
2. If, in a justification, a student refers to information produced by the graphing calculator, this information must be presented clearly in the response. For example, if a graph is used in the solution of the problem, it is important to sketch the graph, showing its general shape and indicating the appropriate window dimensions.
3. When using the calculator, a student should provide a decimal answer that is correct to **at least two decimal places** (unless otherwise indicated). Such rounding should occur **only** in the final step of the solution.

This examination is designed to be completed in **two hours**. *Students may, however, take up to 60 minutes of additional time to finish.*