

# FOUNDATIONS OF MATHEMATICS AND PRE-CALCULUS 10

## TABLE OF SPECIFICATIONS FOR THE PROVINCIAL EXAMINATION

| CURRICULUM                        | COGNITIVE PROCESS |           |           | TOTAL            |
|-----------------------------------|-------------------|-----------|-----------|------------------|
| ORGANIZERS                        | Knowing           | Applying  | Reasoning |                  |
| <b>A: Measurement</b>             | 6                 | 6         | 3         | <b>15 (25%)</b>  |
| <b>B: Algebra and Number</b>      | 10                | 6         | 2         | <b>18 (30%)</b>  |
| <b>C: Relations and Functions</b> | 11                | 13        | 3         | <b>27 (45%)</b>  |
| <b>TOTAL:</b>                     | <b>27</b>         | <b>25</b> | <b>8</b>  | <b>60 (100%)</b> |

The values in this table are approximate. The weighting of each topic is intended to reflect instructional time.

### Examination Configuration:

60 questions worth 1 mark each consisting of:

- 12 multiple-choice questions (calculator not permitted)
- 42 multiple-choice questions (calculator permitted)
- 6 numerical-response questions (calculator permitted)

### Acknowledgement

**The Ministry of Education wishes to acknowledge the contribution of British Columbia teachers in the preparation and review of this document.**

# FOUNDATIONS OF MATHEMATICS AND PRE-CALCULUS 10

## DESCRIPTION OF THE PROVINCIAL EXAMINATION

The Table of Specifications outlines the weight of each curriculum organizer and cognitive process on the provincial examination. A detailed description of the mathematical processes and the examinable material within each curriculum organizer can be found in *The Common Curriculum Framework for Grades 10–12 Mathematics*, 2008 (CCF).

At the beginning of the examination, students will receive an Examination Booklet and two bubble sheets. Students will begin Part A using the first bubble sheet with an approved calculator placed on the floor below their desks.

**PART A: Multiple-choice questions (calculator not permitted) worth 20% of the examination.**

The first **12 questions** are to be done without the use of any calculator.

The purpose of this non-calculator section is to assess the mathematical processes of Mental Mathematics and Estimation, and Visualization in a manner such that technology does not replace mathematical understanding (CCF p. 9). Students will be expected to perform basic calculations and operations on simple numbers.

The suggested time for this part is **30 minutes**; however, students will be given 40 minutes before they must hand in the first bubble sheet. During the first 40 minutes, students may proceed to other questions on the examination; however, they will not be able to access their calculator until all of the first bubble sheets have been collected at the end of 40 minutes. **There are many questions in the remaining part of the examination that do not require a calculator.** Once the first bubble sheet is handed in, students will not be able to go back to any of these first 12 questions.

At the end of the 40 minutes, the first bubble sheets will be collected and students will be allowed to place their calculators on their desks and use their calculator for the remainder of the examination session.

**PART B: Multiple-choice questions (calculator permitted) worth 70% of the examination.**

These **42 questions** contain **some** questions for which a calculator is required. The suggested time for this part is **75 minutes**.

**PART C: Numeric-response questions (calculator permitted) worth 10% of the examination.**

While students are expected in this course to determine the reasonableness of calculated values, one of the purposes of this part of the exam is to ensure that students are indeed doing the required work and not simply substituting the various numbers provided in the equation that they need to solve, for instance.

There will be **some** questions for which a calculator is required. The suggested time for this part is **15 minutes**.

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