
2023–2024 Calculator Information and Rules for Mathematics and Science Diploma Exams

Introduction

This document contains information on the rules that apply to the use of calculators when mathematics and science diploma exams are administered and written. For an overview of the calculator policy, see the [Diploma Examinations Program General Information Bulletin](#).

Permitted and prohibited calculator materials

Permitted Calculator Materials

Students may bring the following materials into the diploma exam writing room, for their exclusive use, when writing diploma exams:

- an approved graphing calculator that is appropriately cleared and configured,
or
a scientific calculator that is appropriately configured and does not have prohibited properties
- extra batteries

Prohibited Calculator Materials and Properties for Scientific and Graphing Calculators

The following calculator properties and materials are **not** permitted during the writing of diploma exams:

- programmed memory content
- symbolic manipulation capabilities (e.g., simplifying or factoring polynomial expressions)
- ability to provide trigonometric calculation exact values
- ability to simplify radicals and rationalize denominators
- wireless communication capabilities
- built-in notes, libraries, or formulae (e.g., definitions or explanations in alpha notation)
- downloaded programs
- external (peripheral) devices and other support materials such as manuals, printed or electronic cards, printers, memory expansion chips or cards, external keyboards
- calculator cases

List of approved graphing calculators

Alberta Education has approved the use of the following **graphing** calculators, **if they are properly cleared and configured**, during the writing of diploma exams. This list is updated annually.

Casio

- fx-9750 GII
- fx-9750 GIII (**must** be in examination mode)
- fx-9750 G Plus (no longer manufactured)
- fx-9860 GII (no longer manufactured)

Sharp (no longer manufactured or sold in Canada)

- EL-9600
- EL-9600C
- EL-9900

Texas Instruments

- TI-83 Plus
- TI-84 Plus
- TI-84 Plus CE Python
- TI-84 Plus Pocket SE (no longer sold in Canada)
- TI-Nspire CX II
- TI-Nspire CX II CAS (CAS **must** be disabled)

The following Texas Instruments calculator models are approved, but are no longer manufactured.

- TI-83
- TI-83 Plus Silver
- TI-84 Plus Silver
- TI-84 Plus C Silver Edition
- TI-Nspire (with Touchpad or Clickpad)
- TI-Nspire CX Handheld
- TI-84 Plus CE

Scientific calculators

The following scientific calculators are **not** permitted during the writing of diploma exams due to their prohibited properties. This is **not** an exhaustive list as all scientific calculators must be checked and approved.

- Casio fx-115 ES Plus (or ES Plus 2)
- Casio fx-CG10 or fx-CG50
- Casio fx-991 ES Plus (or ES Plus C or ES Plus 2 or EX)
- Casio fx-300 ES (or ES Plus or ES Plus 2)
- Casio fx-82 ES Plus
- Casio fx-85 ES Plus
- Casio fx-95 ES Plus
- Casio fx-350 ES Plus
- Sharp EL W516X Writeview
- Sharp EL W535X Writeview
- TI 36X Pro
- TI 30XS Multiview

When checking scientific calculators for prohibited properties, it is advisable to check both trigonometric and radical values. For example, the calculations $\sqrt{12}$ and $\cos(30^\circ)$ should result in decimal values and not exact values. With these calculations, the button that converts fractions to decimals, and vice versa, should also be tested.

Rules

The following rules apply to the use of calculators when diploma exams are administered and written.

Principals

1. Principals shall ensure that, at the beginning of any mathematics or science diploma exam course, teachers and students are advised of the types of calculators that are currently approved for use during the writing of a diploma exam.
2. Prior to each diploma exam administration, the principal of a school or designated writing centre shall
 - 2.1. establish appropriate procedures to ensure that only approved calculators are brought into the diploma exam writing room
 - 2.2. communicate to students and teachers the rules related to the use of approved calculators during diploma exams
 - 2.3. develop procedures for teachers to properly clear and configure approved calculators to safeguard test security, validity, and fairness to all students

Diploma exam supervisors

1. Exam supervisors who supervise diploma exam administrations shall implement procedures to ensure that
 - 1.1. only approved calculators are brought into the diploma exam writing room
 - 1.2. approved calculators have been appropriately cleared and configured by diploma exam supervisors **before** and **after** the officially scheduled diploma exam administration
2. Prior to the commencement of the diploma exam administration, diploma exam supervisors shall review with students the diploma exam calculator use rules and procedures, and students' responsibilities for implementing them

Students

1. Students who write mathematics and science diploma exams shall
 - 1.1. understand all diploma exam calculator use rules and procedures, and their responsibilities for implementing them
 - 1.2. bring only **one** approved and appropriately configured calculator to the diploma exam writing room **for their exclusive use**
 - 1.3. ensure that their calculator has been appropriately cleared and configured by the diploma exam supervisor **before** and **after** writing the diploma exam