



GUIDELINES ON THE USE OF ELECTRONIC CALCULATORS IN NATIONAL EXAMINATIONS

1. The scientific calculators used in the PSLE Mathematics and Foundation Mathematics examinations should have the following minimum features:
 - (a) four arithmetic operations (+, −, ×, ÷) including the order of operations and use of brackets;
 - (b) fractional function which retains the fraction in the form 'a/b' and 'a b/c';
 - (c) square root ($\sqrt{\quad}$) and cube root ($\sqrt[3]{\quad}$) functions; and
 - (d) value of Pi (π).

2. The following guidelines are to be adhered to in the use of scientific calculators in national examinations.
 - (a) The calculator must be silent, with a visual display only.
 - (b) The working condition of the calculator is the responsibility of the pupil and a fault in a calculator cannot be used as a reason for seeking special consideration for the user.
 - (c) Calculators must not be borrowed from other pupils in the course of the examination for any reason.
 - (d) External storage media, e.g. card, tape, and plug-in modules, must not be in the possession of pupils during the examination.
 - (e) No unauthorised materials, e.g. instructions leaflets, formulae printed on the lid or cover of a calculator or similar materials, must be in the possession of pupils during the examination (where the instructions cannot be removed they should be securely covered).
 - (f) No programmable calculators are allowed.
 - (g) No calculators with permanent features of a programmed kind are allowed, e.g. calculators capable of numerical integration, numerical differentiation, and/or expressing in irrational number form.
 - (h) No calculators with special communication features are allowed, e.g. calculators with the capability of remote communication via infra-red or blue-tooth with other machines.
 - (i) No calculators with capabilities for storing and displaying visual and verbal information are allowed.

3. Graphing calculators are allowed for use ONLY in subjects examined at H1, H2 and H3 Levels of the GCE A-Level Curriculum. Candidates are to note the following:
 - (a) No prepared programs may be taken into the examination room. Information (including text or formulae) and/or programs stored in the calculator's memory must be cleared before the examination.
 - (b) No calculators with built-in symbolic algebra manipulations, symbolic differentiation or integration are allowed.

4. The use of any calculator with unacceptable features or for retrieval of information/programs during the examinations is an infringement of the regulations.

5. The list of approved models of scientific and graphing calculators can be found in Annex A.



LIST OF APPROVED SCIENTIFIC CALCULATORS

The following models of Scientific Calculators are suitable for:

- PSLE Mathematics and Foundation Mathematics Examinations
- GCE N(T), N(A), O and A-Level Examinations

S/N	Calculator Brand	Calculator Model	For use until Year
1	CASIO	FX 82MS	2018
2		FX 85MS	2018
3		FX 95MS	2018
4		FX 95 SG Plus	2018
5		FX 350MS	2018
6		FX 96 SG Plus	2017
7	HEWLETT PACKARD	HP10S	2018
8		HP10S+	2018
9	HUBBLE COMPUTING	SC-10B	2015
10	REDSPOT COMPUTING	SC-10B	2015
11		SC-10C	2015
12	SHARP	EL 509WM	2018
13		EL 509WS	2018
14		ELW531S	2019
15		ELW531M	2016
16		ELW531XM	2018
17		EL 533X	2017
18	TEXAS INSTRUMENTS	TI 30XIIS	2018

LIST OF APPROVED GRAPHING CALCULATORS

The following models of Graphing Calculators are approved for use **ONLY** in subjects examined at H1, H2 and H3 Levels of the A-Level curriculum.

Note: All graphing calculators must be reset prior to any examination.

S/N	Calculator Brand	Calculator Model	For use until Year
1	CASIO	FX-9860G Slim	2018
2		FX-9860GIIIs	2018
3	TEXAS INSTRUMENTS	TI-83 PLUS	2018
4		TI-84 PLUS	2015
5		TI-84 PLUS Silver Edition	2015
6		TI-84 PLUS Pocket SE	2016

The following are some older models of scientific and graphing calculators from the 2013 list. They will be removed from this list from 2016 onwards if there is no application for extension of their validity period.

Scientific Calculators:

S/N	Calculator Brand	Calculator Model
1	AURORA	SC 550
2	FIAMO	SC 6
3		SC 20
4	CANON	F-715S
5	CASIO	FX 82AU
6		FX 820MS
7		FX 992S
8	HEWLETT PACKARD	HP 8S
9		HP 9S
10	HOSEKI	H-1030
11		H-1031
12	SHARP	EL 509VM
13		EL 509W
14		EL 546VA
15	TEXAS INSTRUMENTS	TI 30XIIB
16		TI 34II

Graphing Calculators:

S/N	Calculator Brand	Calculator Model
1	CASIO	CFX-9850GC PLUS
2		FX-9860G