

Calculator Policy for the NJSLA-Mathematics and NJSLA-Science

Usage of calculators is permitted only in the calculator section of mathematics units and in all units of science.

- In grades 6, 7 and high school, one of the mathematics units is split into two sections: a non-calculator section and a calculator section. The other units permit calculator usage throughout the entire unit.
- In grade 8 mathematics, calculators are not allowed in the first unit, but the remaining units permit calculator usage throughout the entire unit.
- In science, all units permit calculator usage.

For online testing, grade-specific calculators are available for use within the TestNav environment. For paper-based testing, specific grade appropriate calculators are allowed. See the Frequently Asked Questions (FAQs) #1 below for additional information.

Allowable Calculators for Math

- Grades 3–5: No calculators allowed, except for students with an approved calculator accommodation (see below)
- Grades 6–7: Four-function calculators with square root and percentage functions
- Grade 8: Scientific calculators
- High school: Graphing calculators (with functionalities consistent with TI-84 or similar models)

Allowable Calculators for Science

- Grade 5: Four-function calculators with square root and percentage functions
- Grade 8: Scientific calculators
- Grade 11: Graphing calculators (with functionalities consistent with TI-84 or similar models)

Additionally, schools must adhere to the following additional guidance regarding calculators:

- No calculators with Computer Algebra System (CAS) features are allowed.
- No tablet, laptop (or PDA), or phone-based calculators are allowed during the assessments.
- Students are not allowed to share calculators within a testing session.
- Test Administrators must confirm that memory on all calculators has been cleared by resetting the
 calculator to its default settings before and after each testing session. Additional steps may be
 needed to completely clear all memory, stored programs and formulas, archives, and non-factoryinstalled apps for graphing calculators. See the FAQs (#12) below for additional clarification on
 how to clear the memory, stored programs, and formulas of graphing calculators.
- Calculators with "QWERTY" keyboards are not permitted.
- If schools or districts permit students to bring their own hand-held calculators for the assessment purposes, test administrators must confirm that the calculators meet the requirements as defined above.

Calculator Accommodations

For students who meet the guidelines for an accommodation to have a calculation device, this accommodation allows a calculator to be used on non-calculator sections of any assessment, or to use a calculator designated for a lower grade. The following are allowable calculators for the accommodation on non-calculator sections:

- **Grades 3–5:** Four-function calculators with square root and percentage functions
- Grades 6–7: Four-function calculators with square root and percentage functions
- **Grade 8:** Scientific calculators (Student may also bring a four-function with square rootand percentage functions in addition to grade-level calculator.)
- **High School:** Graphing calculators with functionalities consistent with TI-84 or similar models. (Student may also bring a scientific calculator or a four-function with square root and percentage functions.)

If a student needs a calculator as part of an accommodation in the non-calculator section on a computer-based test, the student will need a hand-held calculator because an online calculator will not be available. If a student needs a specific calculator (e.g., large key, talking), the student can also bring his or her own, provided it is specified in his or her approved IEP or 504 Plan.

Frequently Asked Questions about the Calculator Policy

1. Can students use hand-held calculators for computer-based assessments?

Yes. Students may use hand-held calculators on computer-based Mathematics and Science assessments on sections where a calculator is allowable if they prefer. All hand-held calculators must meet the requirements as defined in the Calculator Policy. For computer-based testing, a grade appropriate calculator is available for students to use during the calculator section of the mathematics assessments.

It is recommended that schools identify which students prefer to use a hand-held calculator prior to administration to ensure that a sufficient number of calculators is available. Hand-held calculators are required for paper-based testing. Test administrators are responsible for ensuring hand-held calculators meet specifications, including ensuring the memory is cleared before and after administration.

2. Can students use their own calculators on the assessments?

Yes. However, test administrators must confirm that the calculators meet the requirements as defined in the Calculator Policy.

3. Can students use calculators on the assessments that are allowable for higher or lower grade level assessments?

In general, no. Students must only use calculators that are allowable for their grade/course assessment. The assessment items were developed with the Calculator Policy in mind. Allowing for the use of a calculator that is designated for a lower or higher-grade level assessment may unfairly disadvantage or advantage students and is, therefore, not allowed. **Exception**: Students with a disability that *severely limits or prevents* their ability to perform basic calculations may receive an accommodation, according to their IEP or 504 plan, to use a calculator designated for a lower grade on Mathematics or Science Assessments.

4. If a student takes an Algebra I course where a graphing calculator is used, but the student is taking a grade 8 assessment where a scientific calculator is used, which calculator should they use?

Calculator usage is assessment specific, regardless of the student's grade level (e.g., a student who takes the assessment for a specific grade or course must use the calculator required by the Calculator Policy for that assessment). In this example, the student should use a scientific calculator, since the student is taking the grade 8 assessment. A student taking the Algebra I assessment would use the graphing calculator for this assessment regardless of the student's grade level. Schools should ensure students have ample opportunity to practice with the allowable calculator for their grade/course assessment.

5. Does my school have to buy new calculators?

All schools participating in computer-based assessments will be provided an online calculator through the computer-based delivery platform. If a student chooses to use a hand-held calculator, they may either bring their own calculator or the school may provide the calculator. For paper-based assessments, students in grades 6 and higher must have a hand-held calculator for the calculator portion of the mathematics assessment, and all students must have a hand-held calculator for the science assessment. Either schools must ensure they have a sufficient number of the appropriate calculators available or allow students to bring their own. All calculators must meet the requirements defined in the Calculator Policy.

6. If a student has the Calculation Device and Mathematics Tools (on Non-Calculator Sections of Mathematics Assessments) accommodation, what allowable mathematics tools can be used?

A student with the accommodation to have a calculation device and mathematics tools (on non-calculator sections of the mathematics assessments) may only use the following mathematics tools to aid in calculation:

- Arithmetic tables (e.g., addition charts, subtraction charts, multiplication charts; division charts)
- Two-color chips (e.g., single-sided or double-sided)
- Counters and counting chips
- Square tiles
- Base 10 blocks
- 100s chart

7. Can students use the TI-Nspire (non-CAS) calculator on the high school assessments?

Yes. The TI-Nspire (non-CAS) calculator meets the requirements as defined in the Calculator Policy.

8. Do memories have to be cleared on every handheld calculator?

Yes. Calculator memories must be cleared by resetting the calculator to its default settings before and after each testing session.

9. What will happen to my apps when the calculator is reset to its default settings?

Preinstalled apps will still be present on the calculator after it has been reset. However, apps that have been created by the user will be deleted during the resetting process. If those apps are needed after testing has been completed, it would be prudent to transfer those apps to a PC/Mac prior to testing.

10. When is the memory reset on the online graphing calculator in TestNav?

The online graphing calculator resets to its default settings after each unit. However, within a unit, the screen display on the online graphing calculator will carry from item to item.

11. In what mode, radians or degrees, is the online graphing calculator set?

The default mode of the online graphing calculator at the beginning of each unit is radians.

12. How do I clear the memory for TI graphing calculators?

To clear the memory of TI-84 graphing calculators (or similar models), students and/or Test Administrators should complete the following steps:

Select the following:

- 2nd
- +(Mem)
- 7: Reset
- Scroll right twice to "All"
- 1: All Memory
- 2: Reset

The screen should say "Resetting All." When completed, the screen will say "Mem Cleared."

There may be other steps for completely clearing the memory for non-TI graphing calculators. Test Administrators are expected to check that all memory, programs, formulas, archives, and non-factory installed apps have been cleared from calculators that will be used during state testing.