Calculation Devices

Description of Accommodation

This accommodation provides an alternate method of computation for a student with a disability who is unable to effectively use paper-and-pencil methods.

Assessments

For a student who meets the eligibility criteria, this accommodation may be used on

- STAAR grades 3–8 mathematics tests and STAAR grades 5 and 8 science tests
- STAAR Spanish grades 3–5 mathematics tests and STAAR Spanish grade 5 science test
- STAAR L grades 3–8 mathematics tests and STAAR L grades 5 and 8 science tests
- STAAR Modified grades 3–8 mathematics tests and STAAR Modified grades 5 and 8 science tests

Student Eligibility Criteria

A student may use this accommodation if he or she

☐ receives special education or Section 504 services,
☐ routinely, independently, and effectively uses the accommodation during classroom instruction and testing, and
☐ meets at least one of the following for the applicable grade.

Grades 3 and 4

- The student has a physical disability that prevents him or her from independently writing the numbers required for computations and cannot effectively use other allowable materials to address this need (e.g., whiteboard, graph paper).
- The student has an impairment in vision that prevents him or her from seeing the numbers they have written during computations and cannot effectively use other allowable materials to address this need (e.g., magnifier).

Grades 5 through 8

- The student has a physical disability that prevents him or her from independently writing the numbers required for computations and cannot effectively use other allowable materials to address this need (e.g., whiteboard, graph paper).
- The student has an impairment in vision that prevents him or her from seeing the numbers they have written during computations and cannot effectively use other allowable materials to address this need (e.g., magnifier).
- The student has a disability that affects mathematics calculations. Even after intensive instruction and remediation, the student is consistently unable to memorize basic addition, subtraction, multiplication, or division facts or perform the steps in an algorithm correctly when solving problems.
Authority for Decision and Required Documentation

- For a student receiving special education services, the decision is made by the ARD committee based on the eligibility criteria and is documented in the student’s IEP.
- For a student receiving Section 504 services, the decision is made by the placement committee based on the eligibility criteria and is documented in the student’s IAP.
- In the case of an ELL with a disability, the decision should be made by the applicable group above in conjunction with the student’s LPAC. The decision is to be documented by the LPAC in the student’s permanent record file and by the other applicable group, as described above.
- After statewide testing, the accommodation type must be recorded in the ACCOMMODATIONS field on the student’s answer document or in the Assessment Management System for online administrations, if applicable. The accommodation type is indicated in the triangle at the top of this document.

No Accommodation Request Form required.

Examples/Types

This accommodation may include ONLY
- four-function calculator
- scientific calculator
- graphing calculator
- large-key calculator
- abacus or Cranmer modified abacus
- audio-graphing calculator
- speech-output calculator

Special Instructions/Considerations

1. A student who uses this accommodation may need to complete the test in a separate setting to eliminate distractions to other students and to ensure the confidentiality of the test. Testing in a separate setting for this purpose is not considered the Individual or Small-Group Administration accommodation.
2. The use of a calculation device as a testing accommodation should not replace the teaching of basic computation skills as outlined in the TEKS.
3. Calculators are a required part of standard test administration procedures (and not considered a testing accommodation) for some statewide assessments. Refer to the document titled “State of Texas Assessments of Academic Readiness (STAAR™) Calculator Policy,” located on the STAAR Resources webpage.
4. For any of the assessments that require a scientific or graphing calculator, a four-function calculator may be provided along with the required calculator to a student receiving special education or Section 504 services.
5. As a testing accommodation, students should use the same type of calculation device they routinely use during classroom instruction and testing. The calculation device may be provided by the school or brought from the student’s home.
### Student Scenarios

Below are student scenarios that are intended to clarify who is eligible to receive a calculation device as an accommodation on applicable statewide assessments. These scenarios do not address every situation in which a student may or may not receive a calculation device as a testing accommodation. Additional scenarios will be provided as needed to address feedback received from educators.

1. Rajiv is a fourth grade student receiving special education services for disabilities in reading and mathematics. He struggles in all areas of mathematics, from recalling basic facts to remembering how to regroup. He has been using a calculator in classroom instruction and testing all year and has improved his ability to get the right answer more often. Can Rajiv be provided a calculator on the STAAR Modified grade 4 mathematics assessment?

   **No.** Rajiv does not meet the eligibility criteria for students in grades 3 and 4 because he has no difficulty writing numbers and has normal vision. It is the expectation that students in grades 3 and 4 be given the opportunity to learn and practice the skills in the TEKS related to addition, subtraction, multiplication, and division without the use of technology.

2. Eliza is a fifth grade student not receiving special education or Section 504 services. She struggles with mathematics computations, but her performance improves when she uses a calculator. She uses a calculator routinely during classroom instruction and testing. Can Eliza be provided a calculator to use on the STAAR grade 5 mathematics and science assessments?

   **No.** Eliza does not meet the eligibility criteria because she does not receive special education or Section 504 services.

3. Jesse is a seventh grade student receiving Section 504 services. His problem-solving and reasoning skills are strong. He is able to recall basic mathematics facts; however, when solving more complex mathematics problems with algorithms, he is unable to remember the steps and often loses his place in the calculation process. Jesse has attended after-school tutoring all year, but scores on classroom assignments and tests indicate that his performance has not improved. A calculator has been added to his IAP, and he now uses it routinely during classroom instruction and testing. This accommodation has allowed Jesse to more appropriately demonstrate his problem-solving skills. Can Jesse be provided a calculator on the STAAR grade 7 mathematics assessment?

   **Yes.** Jesse meets the eligibility criteria for students in grades 5 through 8. Although he has received intensive instruction and remediation, he is still unable to correctly perform the steps in an algorithm to complete more complex mathematics problems.

4. Victor is an eighth grade student receiving special education services to address his needs related to a physical disability. He does not struggle with mathematics reasoning and computation, and he is able to write with a pencil for short amounts of time. However, after writing for about an hour, his muscles become fatigued and begin to cramp. When this occurs, Victor must take a break, which lengthens the time it takes for him to complete mathematics assignments and tests. Because of this, Victor has routinely used a calculator for assignments and tests that are more lengthy. Can Victor be provided a calculator on the STAAR grade 8 mathematics assessment?

   **Yes.** Victor meets the eligibility criteria for calculator use for students in grade 8 because he has a physical disability that prevents him from independently writing the numbers required for computations. Using other allowable materials that require Victor to write are not appropriate given the nature of his disability.
5. Marco is a high school student not receiving special education or Section 504 services. In his Algebra I class, he often makes mistakes when multiplying or dividing large numbers with decimals. However, when using a calculator, he arrives at the correct answer. Can Marco be provided a calculator to use on his STAAR Algebra I assessment?

Yes. Standard test administration procedures for end-of-course mathematics assessments require that one graphing calculator be provided to each student. This requirement is not considered a testing accommodation.

6. Gabby is a sixth grade student receiving special education services under Other Health Impairment to address her needs related to a chronic medical condition. Medication for Gabby’s heart condition affects her stamina and alertness, making it difficult for her to carry out multi-step problems correctly. The ARD committee recently added a calculator as an accommodation for classroom use, which has allowed Gabby to continue to progress in mathematics instruction. Can Gabby be provided a calculator on the STAAR grade 6 mathematics assessment?

Yes. Gabby meets the eligibility criteria for students in grades 5 through 8:

• She receives special education services under OHI.
• She routinely uses a calculator in the classroom with positive results.
• Her medical condition impacts her ability to complete mathematics calculations correctly, and although intensive instruction and remediation are ongoing, success is limited due to her chronic medical condition.