

The background of the slide is a composite image. The top half shows a panoramic view of the Austin skyline at dusk, with the city lights reflecting on the water. The bottom half shows a close-up of a lake with a small dock and colorful umbrellas. The text "Technology Use Guidelines" is centered over the skyline image in a large, blue, sans-serif font.

Technology Use Guidelines

2019-2020

Purpose of this Document

- This document is intended to expand on the [Technology Guidelines](#) policy document is currently available in the *District and Campus Coordinator Resources (DCCR)*.
- The purpose of this presentation is to provide additional guidance to school personnel in their selection of technology resources for state assessments. It includes clarifications and examples of appropriate technology use during state assessments.

- **Technology Guidelines**
- **STAAR Dictionary Policy**
- **STAAR Calculator Policy**
- **Designated Supports**
 - **Basic Transcribing**
 - **Calculation Aids**
 - **Spelling Assistance**

Technology Guidelines

- **Districts are required to have procedures in place to prevent the use of personal electronic devices during test administrations.**
- **When districts are using allowed or approved technology, including technology-based accessibility features and designated supports, these guidelines for test security and validity must be followed when reviewing the technology for appropriateness prior to its use during an assessment.**
- **Appropriate review requires knowledge of the state curriculum (Texas Essential Knowledge and Skills) for the specific grade level and subject, as well as the capabilities and functions of the device or software to be used during the assessment.**

Technology Guidelines

- **For technology-based designated supports, a student may use allowed technology during a state assessment if he or she routinely and effectively uses it during classroom instruction and classroom testing and is approved to use it based on the decisions of the appropriate committee (e.g., ARD committee, 504 committee, LPAC, RTI committee, or student assistance team).**
- **Some technology may be useful during a daily academic setting. However, this technology cannot be used during a state assessment if it has any functionality that creates an assessment concern that cannot be addressed (e.g., a word processor for basic transcribing that allows access to an internet browser).**

Technology Guidelines

- **District or campus personnel must conduct additional reviews of technology after any upgrade or update to determine if it continues to meet TEA guidelines for use during a state assessment.**
- **All technology used during state assessments must adhere to these guidelines.**
- **Test administrators must actively monitor the use of the technology during a state assessment.**

- **For a device or software to be considered appropriate for state assessment use, it must**
 - be set in a mode that locks the user into a specific software program(s) [e.g., kiosk mode or a districtwide Mobile Device Management system (MDM)]; and/or
 - block the user from accessing functionality that may violate test security, such as
 - the ability to send secure test content (e.g., messages, captured images, videos);
 - the ability to send or receive any person-to-person communication about secure test content (e.g., chat, video); and
 - the ability to save secure test content (if the device or software requires a student's response to be temporarily saved, the district must ensure the file is permanently deleted after the administration).

Technology Guidelines

- **Tablet devices may be used for calculation applications, speech-to-text applications, word processor applications, and dictionary applications. When using tablet applications, districts must ensure the application does not provide functionality that compromises the curriculum assessed.**
- **If an application or software program requires an internet connection to function (e.g., a speech-to-text application requires access to an internet-based word bank), it should be set in a mode that prevents the student from accessing the internet through a browser or accessing any other aids beyond the allowable supports.**
- **If you have questions about whether specific technology meet these guidelines, contact the most appropriate person in your district (e.g., technology staff, curriculum staff).**
- **Applications may NOT be accessed on a cell phone.**



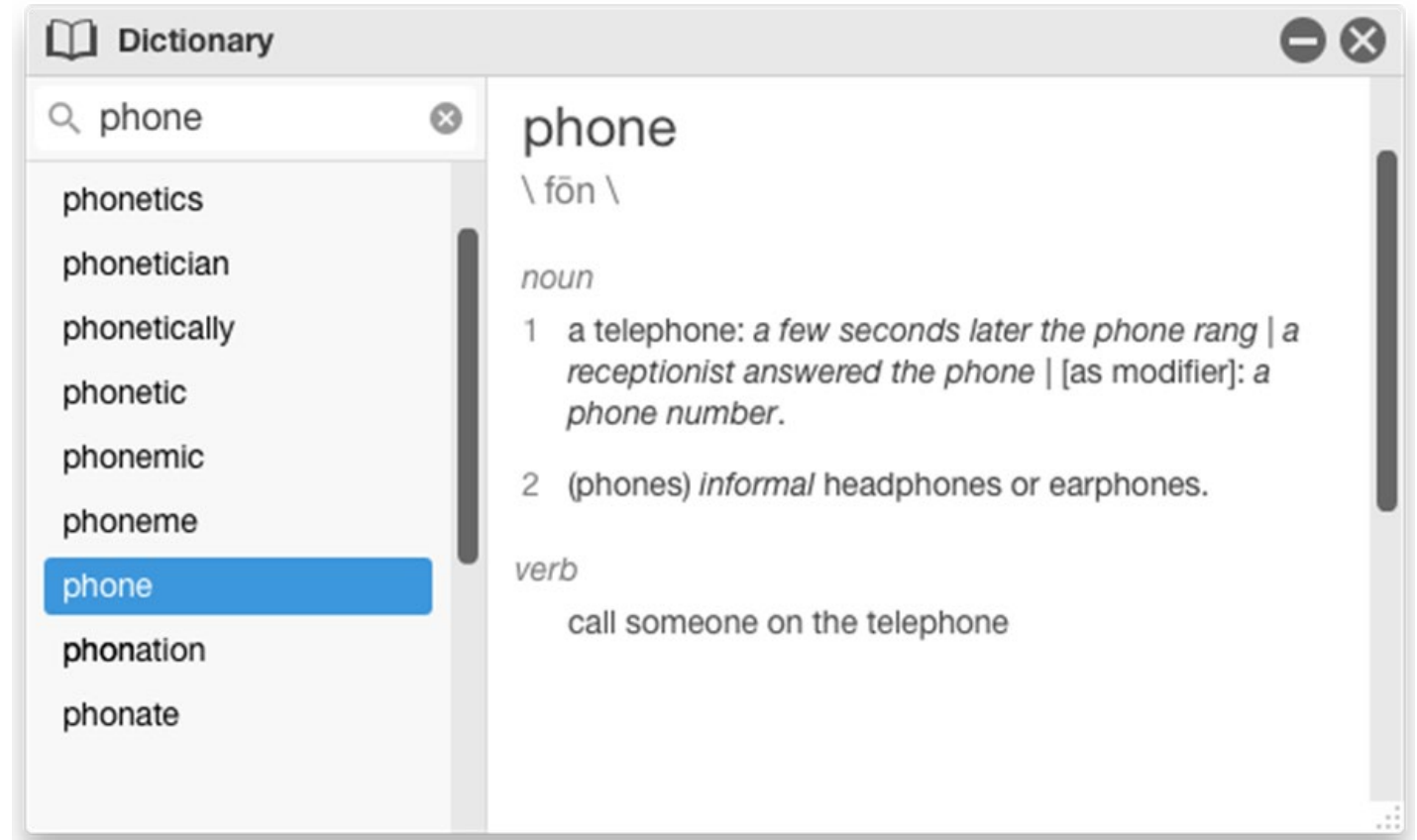
STAAR Dictionary Policy

- **Districts must ensure that dictionaries are available to ALL students taking**
 - STAAR grades 3–8 reading;
 - STAAR Spanish grades 3–5 reading;
 - STAAR grades 4 and 7 writing;
 - STAAR Spanish grade 4 writing; and
 - STAAR English I, English II, and English III.

- **Allowable Dictionaries**
 - Standard monolingual dictionaries in English or the language most appropriate for the student
 - Dictionary/thesaurus combinations
 - Bilingual dictionaries
 - ESL dictionaries (definition of an English word using simplified English)
 - Sign language dictionaries
 - Picture dictionaries

STAAR Dictionary Policy: STAAR Online Dictionary Tool

- A dictionary tool is available on all STAAR online reading and writing tests as required by the STAAR Dictionary Policy.
 - English=Merriam-Webster
 - Spanish=Larousse



STAAR Dictionary Policy: Electronic Dictionaries and Dictionary Applications

- **Dictionary applications on a tablet, laptop, or desktop are allowable under the STAAR Dictionary Policy.**
 - Features that are not allowable must be disabled or the application may not be used.
 - Bilingual dictionary applications may NOT be used as an [accessibility feature](#) on STAAR mathematics, science, or social studies assessments.

- **For electronic dictionaries that are handheld devices, test administrators must ensure that any features that allow image capture, note taking, or uploading of files have been cleared of their contents before and after the test administration.**

Dictionary Applications: Features NOT Allowed

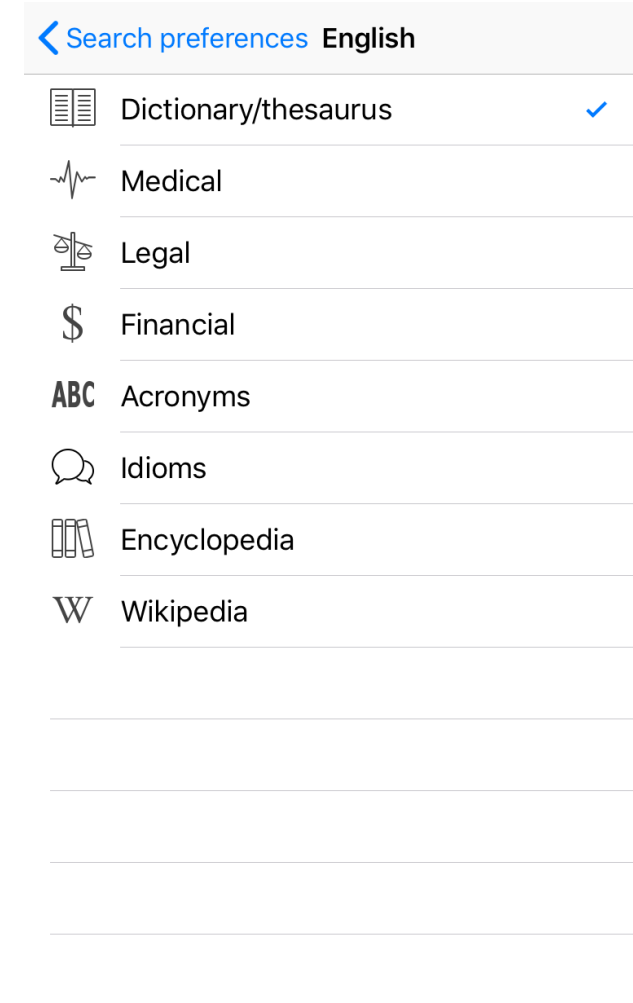
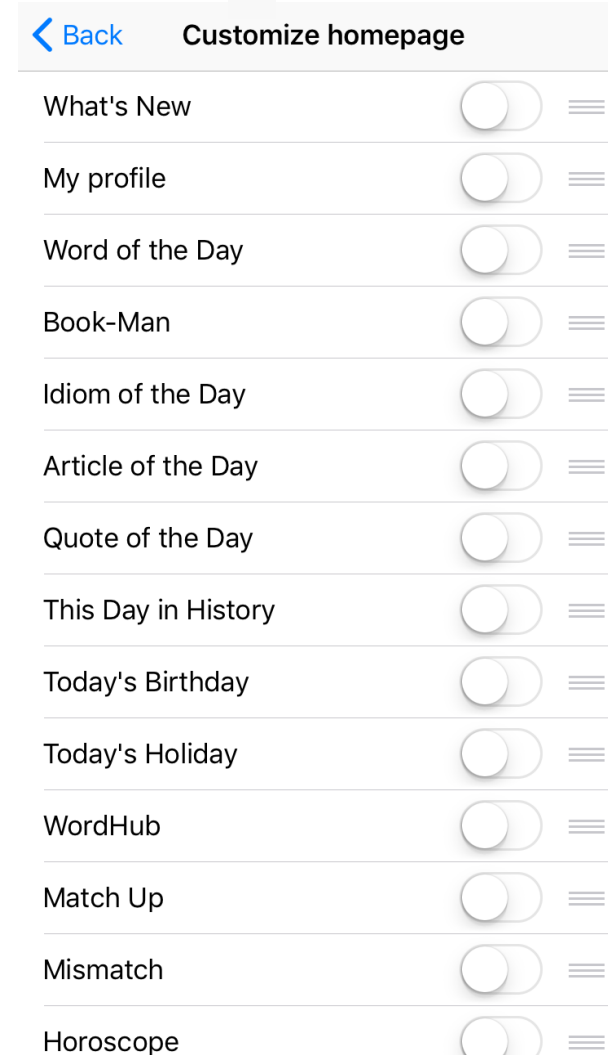
For all dictionary applications, these features/functions must be disabled as outlined in the technology guidelines.

- Internet-browsing
- Identify location of student or search by location
- Videos, animations, or extensive text to expand upon a definition
- E-mail, text, social media
- Games, quizzes, anagrams
- Image capture/camera
- Automatic upgrades and/or syncing on day of test
- Subject-specific or "slang" dictionaries
- Access to offline favorites or recent searches, including customized definitions/glossary
- Highlight words on a webpage to look up

Dictionary Applications: Disabling Features that are NOT Allowed



- These are examples of a dictionary application's settings screen which allow you to disable features that are NOT allowed or to select the features that ARE allowed.
- For assistance on how to disable features on your specific application, perform a web search or contact your district's information technology (IT) department or region service center's assistive technology representative.



■ **Specific calculators are required for students taking**

- STAAR grade 8 mathematics–graphing calculator
- STAAR grade 8 science–calculator with basic (i.e., four-function), scientific, or graphing capability
- STAAR Algebra I–graphing calculator
- STAAR Algebra II–graphing calculator
- STAAR Biology–calculator with basic (i.e., four-function), scientific, or graphing capability

■ **Allowable Calculators**

- Handheld calculators
- Calculator applications
- Calculator tools in the STAAR online testing platform

Calculator Applications: Features NOT Allowed

For all calculator applications, these features/functions must be disabled as outlined in the [Technology Guidelines](#) policy document.

- Functions that compromise the curriculum standards being assessed
- Internet capabilities (if a calculator application requires an internet connection in order to function it should be set in a mode that prevents the students from accessing an internet browser or accessing any other aids beyond the allowed supports)
- Features that allow access to other programs (put in kiosk mode or a districtwide Mobile Device Management system (MDM))
- Computer Algebra System
- Any feature that will allow the ability to share/e-mail a response
- Saved content (i.e., all memory) must be cleared to factory default both before and after testing. Any programs or applications that are not preinstalled by default must be removed or disabled prior to testing.

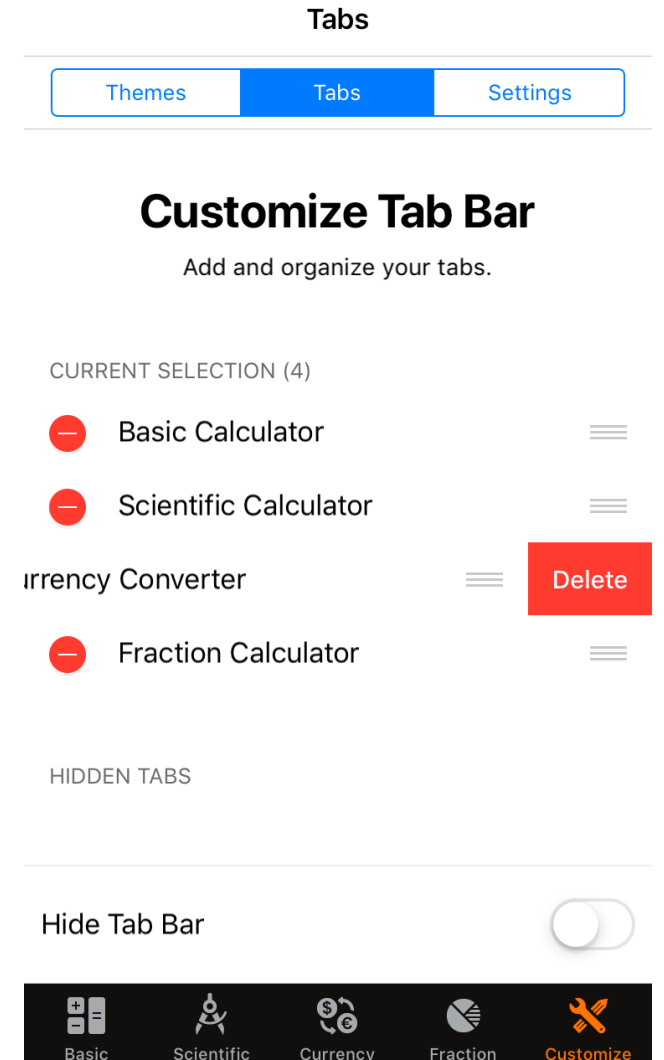
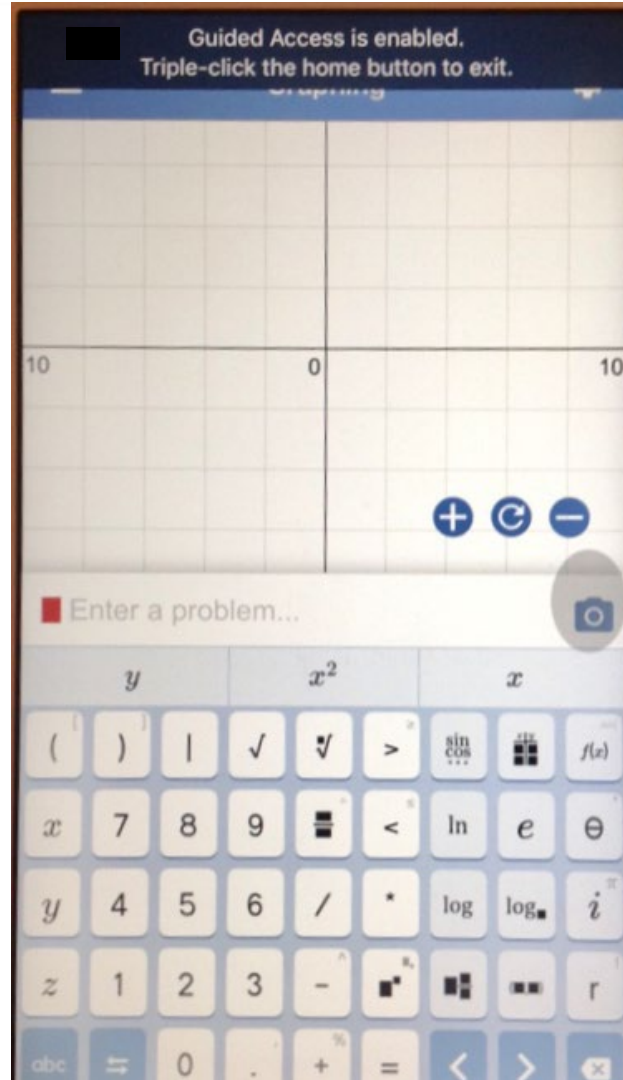
Calculator Applications: Disabling Features that are NOT Allowed



■ These are examples of:

- Guided Access (i.e., kiosk mode), in which the camera feature was disabled, and
- a calculator application's settings screen which allows you to disable features that are NOT allowed or to select the features that ARE allowed.

- For assistance on how to disable features on your specific application, perform a web search or contact your district's IT department or region service center's assistive technology representative.

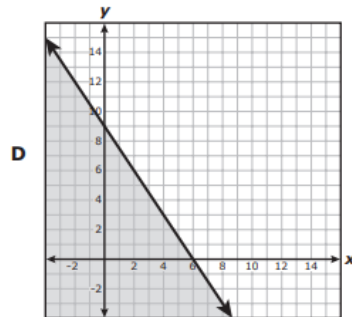
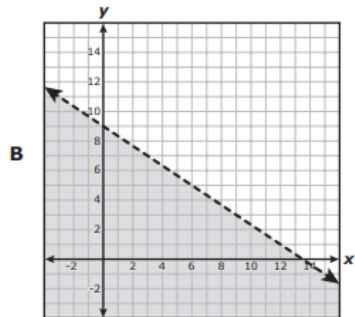
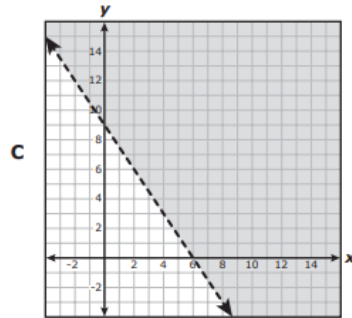
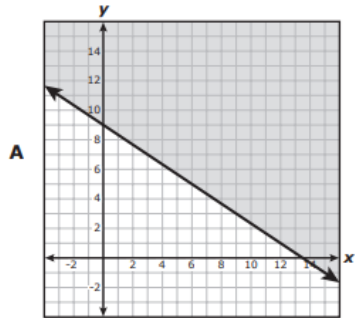


Example of Calculator Applications that Compromise the Standard being Assessed

(A.3) **Number and operations.** Linear functions, equations, and inequalities. The student applies the mathematical process standards when using graphs of linear functions, key features, and related transformations to represent in multiple ways and solve, with and without technology, equations, inequalities, and systems of equations. The student is expected to: (D) graph the solution set of linear inequalities in two variables on the coordinate plane; *Supporting Standard*

Test item from the released 2018 Algebra I EOC test:

Which graph best represents the solution set of $-4x \leq 6y - 54$?



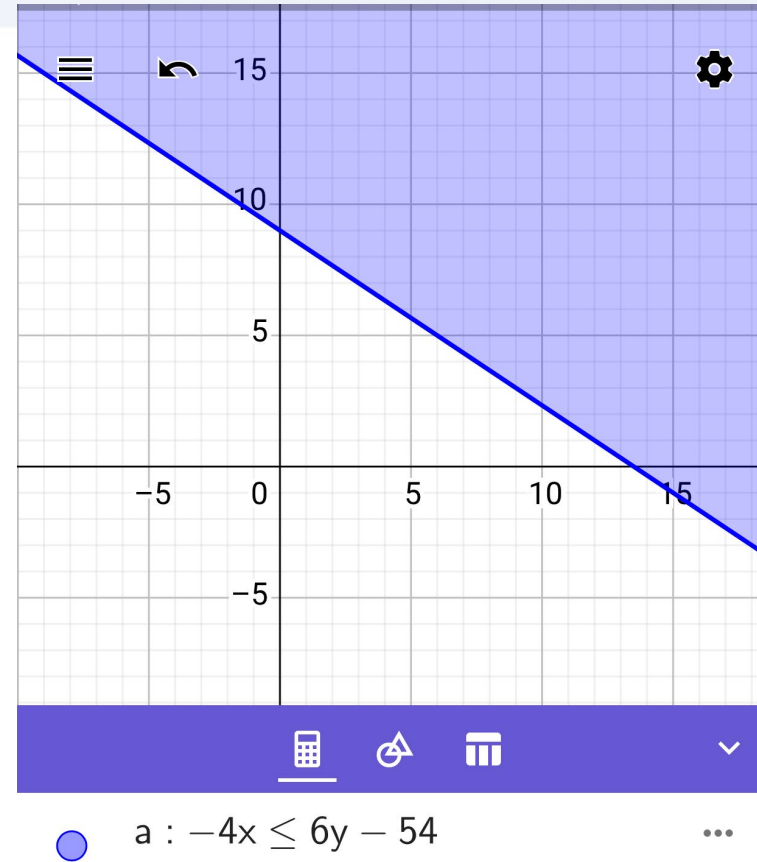
Rationale for option A as the correct answer:

To determine which graph best represents the solution set of $-4x \leq 6y - 54$, the student could have first isolated the y on one side of the inequality. The first step to isolate y is to add 54 to both sides of the inequality, resulting in $-4x + 54 \leq 6y$. The next step is to divide both sides of the inequality by 6, resulting in $-\frac{4}{6}x + 9 \leq y$ or $y \geq -\frac{4}{6}x + 9$, which can be simplified to $y \geq -\frac{2}{3}x + 9$. The student could have then determined that the " \geq " symbol means "greater than or equal to" and the correct solution will be shaded above a solid line (to indicate that points on and above the line are part of the solution). Also, the line will cross the y -axis (vertical axis) at 9 and will have a slope (steepness of a straight line when graphed on a coordinate grid, $m = \frac{y_2 - y_1}{x_2 - x_1}$) of $-\frac{2}{3}$. The rationale for the correct answer is an efficient way to solve the problem. However, other methods could be used to solve the problem correctly.

The next slide shows how two different calculator applications can be used to find the correct answer to this item without requiring the student to demonstrate his/her understanding of the student expectation.

Example of Calculator Applications that Compromise the Standard being Assessed

The example to the right show how the correct answer to the item on the previous slide may be determined by simply typing the inequality into the calculator application.



Some calculator applications may not comply with technology use guidelines because they compromise the standards being assessed, even when the application is in *testing mode*. Careful consideration should be given to the use of applications during testing so that the application itself is not a direct source of answers.

Designated Supports that May Include Technology

Basic Transcribing



- Word processor
- Speech-to-text

Calculation Aids for grades 3-7



- Basic (i.e., four-function) calculator

Spelling Assistance



- Spell-check
- Word prediction
- Text-to-speech
- Speech-to-text

Basic Transcribing Designated Support Policy

The test administrator may carry out Basic Transcribing to transfer an eligible student's responses onto the test booklet, answer document, or into the online testing platform in these situations only.

- The student writes or circles responses in the test booklet for multiple-choice or griddable questions.
- The student points to responses in the test booklet or on the computer screen for multiple-choice questions.
- The student dictates or signs responses for multiple-choice and griddable questions.
- The student writes responses on another workspace (e.g., scratch paper, dry erase board) or types responses on a word processor for multiple-choice questions, griddable questions, or the writing prompt.
- The student uses speech-to-text technology to indicate responses for multiple-choice questions, griddable questions, or the writing prompt.
- The student dictates or signs information to be recorded in the margins of the test booklet or in the notes tool for online tests (does NOT apply to math calculations or responses to the written composition).

Basic Transcribing

Word Processor: Features NOT Allowed

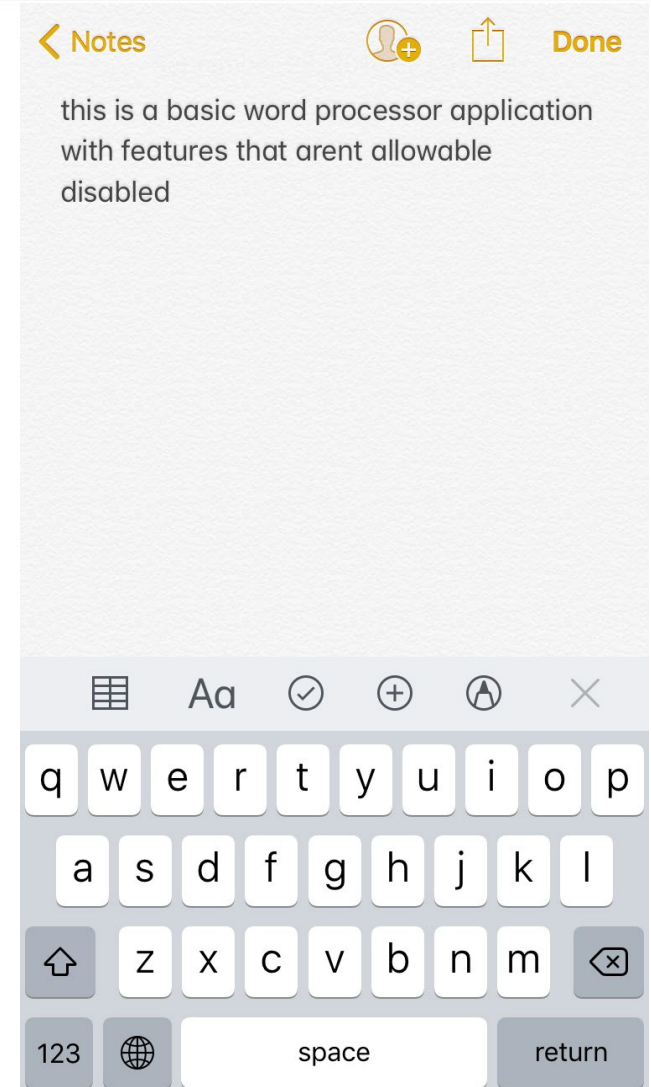
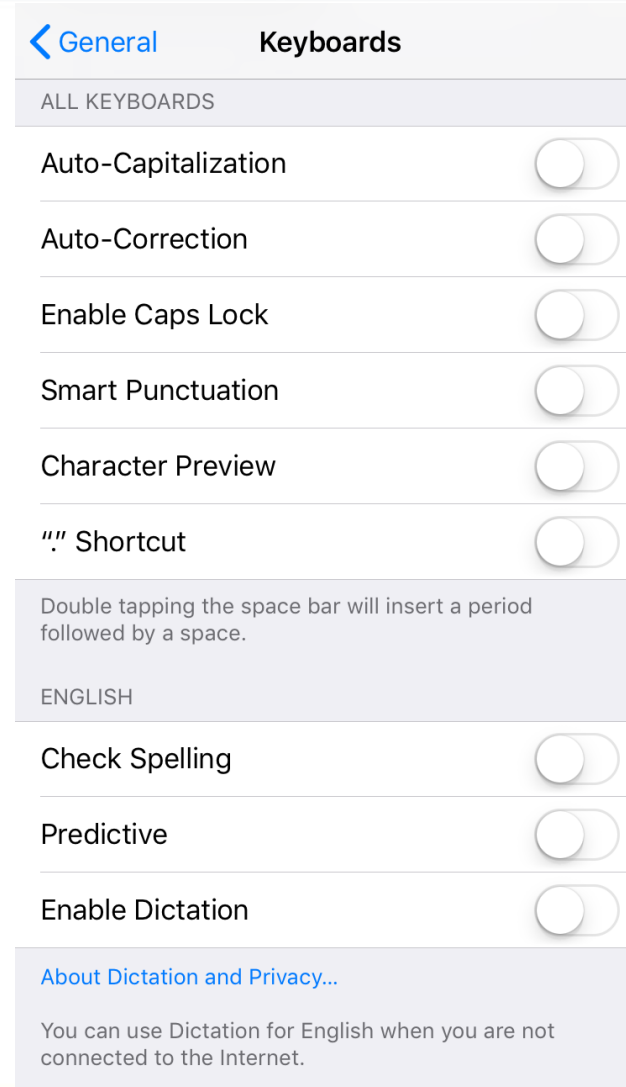
If the eligible student is taking an online test, a separate desktop or laptop may be necessary, or the online test will need to be paused so the student can use the software. Features that must be disabled or made unavailable as outlined in the [Technology Guidelines](#) for eligible students receiving this designated support include:

- internet capabilities (If a word processing software requires an internet connection to function, it should be set in a mode that prevents the student from accessing an internet browser or accessing any other aids beyond the allowed supports.);
- any feature that will allow the ability to access other programs/features not allowed on the device;
- any feature that will edit or aid a student's response (e.g., spell-check, word predictor, auto-correct for punctuation, capitalization, etc.);
- saving capabilities (If a word processing software requires a student's response to be temporarily saved, the district must ensure the file is permanently deleted after the administration.); and
- any feature that will allow the ability to share/email a response.

Basic Transcribing Word Processor: Disabling Features that are NOT Allowed



- **This is an example of a tablet's keyboard settings which allow you to disable features that are NOT allowed.**
- **For assistance on how to disable features on your specific application, perform a web search or contact your district's IT department or region service center's assistive technology representative.**

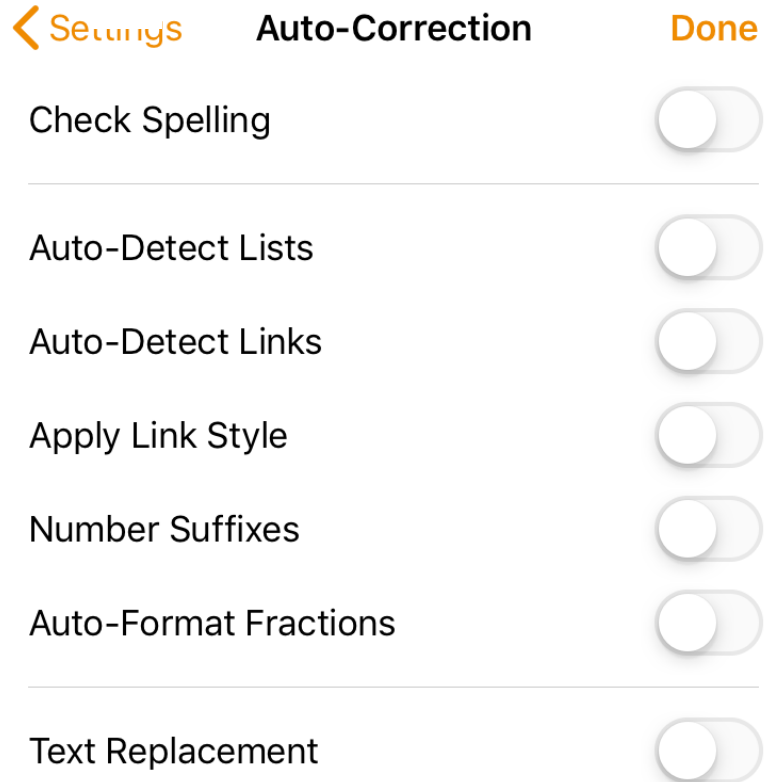


Basic Transcribing Speech-to-Text: Features NOT Allowed

An eligible student may use speech-to-text technology outside of the testing platform if he or she routinely uses this support during instruction. This may be in the form of an application on a tablet or software on a desktop or laptop. Features that must be disabled or made unavailable as outlined in the technology guidelines for eligible students receiving this designated support include:

- any feature that will edit or aid a student's response, such as, but not limited to:
 - grammar check (i.e., automatic underline that indicates to student a correction is needed); and
 - automatic capitalization and punctuation;
- any feature that will save a typed response (If a speech-to-text application requires a student's response to be temporarily saved, the district must ensure the file is permanently deleted after the administration.);
- any feature that will allow the ability to share/e-mail a response;
- internet capabilities (If a speech-to-text application requires an internet connection to function, it should be set in a mode that prevents the student from accessing an internet browser or accessing any other aids beyond the allowed supports.);
- translation services; and
- any feature that will allow the ability to access other programs/features not allowed on the device.

Basic Transcribing Speech-to-Text: Disabling Features that are NOT Allowed



all features that will edit or aid a students response such as but not limited to grammar check
word predictor automatic capitalization and punctuation have been disabled

- **This is an example of a speech-to-text application's settings, which allow you to disable features that are NOT allowed.**
- **For assistance on how to disable features on your specific application, perform a web search or contact your district's IT department or region service center's assistive technology representative.**

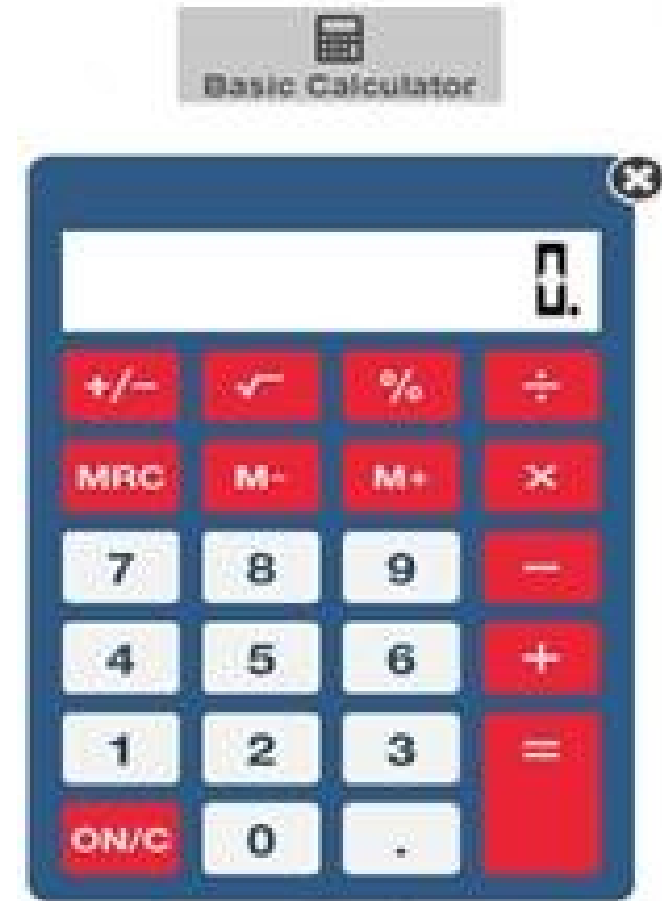
Calculation Aid Designated Support Policy

For eligible students taking a grade 3–7 STAAR or STAAR Spanish math or science assessment, ONLY the following calculators may be used:

- Basic (i.e., four-function) handheld calculator or calculator application, including large-key or speech-output
- Basic Calculator available as an online embedded support on STAAR
- Abacus or Cranmer modified abacus
- 0–9 addition grid without special numbers (e.g., even numbers) indicated
- Grade-appropriate multiplication grid without special numbers (e.g., perfect squares) indicated

Online Basic Calculator Tool

- For questions regarding the functions of a basic calculator (i.e., four function), see the Basic Calculator tool in the STAAR Online Testing Platform.
- A Basic Calculator is available as a embedded PNP support on STAAR in the grades and subjects listed in the "Assessments" section of designated support document.
- The tool is available in a practice test in the STAAR Online Testing Platform.



Example of Calculator Functions that Compromise the Standards Being Assessed

(5.3) **Number and operations.** The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy. The student is expected to

(H) represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations; **Supporting Standard**

Some calculation applications have a function that will not allow for an accurate assessment of this standard. While this function is NOT allowable under the Calculation Aids designated support policy, it is allowable under the STAAR Calculator Policy for grade 8 mathematics, grade 8 science, Algebra I, Algebra II, and biology.



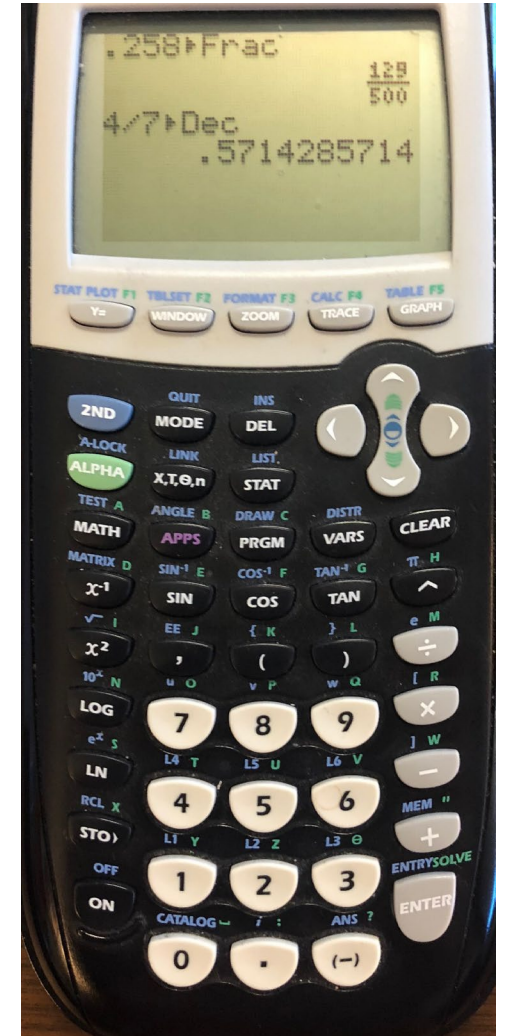
Example of Calculator Functions that Compromise the Standards Being Assessed

(6.4) **Proportionality**. The student applies mathematical process standards to develop an understanding of proportional relationships in problem situations. The student is expected to:

(G) generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money;

Readiness Standard

Some calculation applications have a function that will not allow for an accurate assessment of this standard. While this function is NOT allowable under the Calculation Aids designated support policy, it is allowable under the STAAR Calculator Policy for grade 8 mathematics, grade 8 science, Algebra I, Algebra II, and biology.

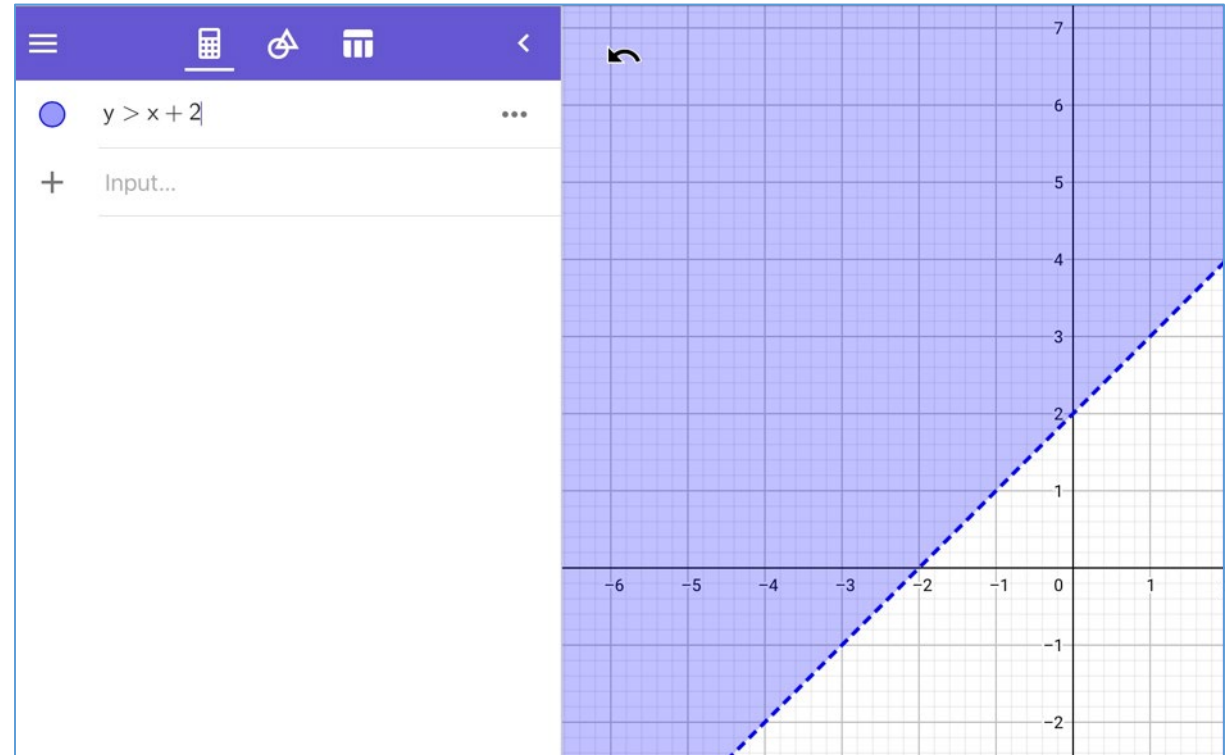


Example of Calculator Functions that Compromise the Standards Being Assessed



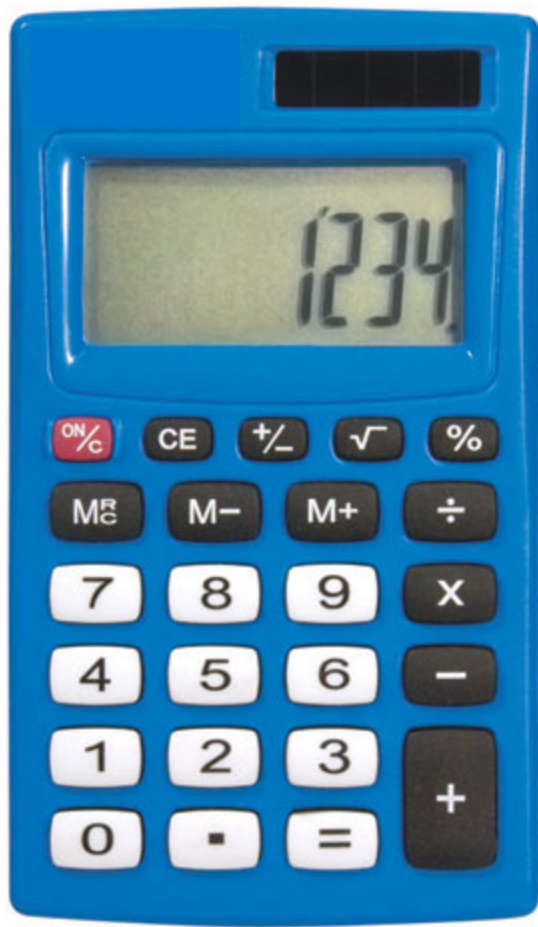
(7.11) **Expressions, equations, and relationships.** The student applies mathematical process standards to solve one-variable equations and inequalities. The student is expected to

(A) model and solve one-variable, two-step equations and inequalities; ***Readiness Standard***

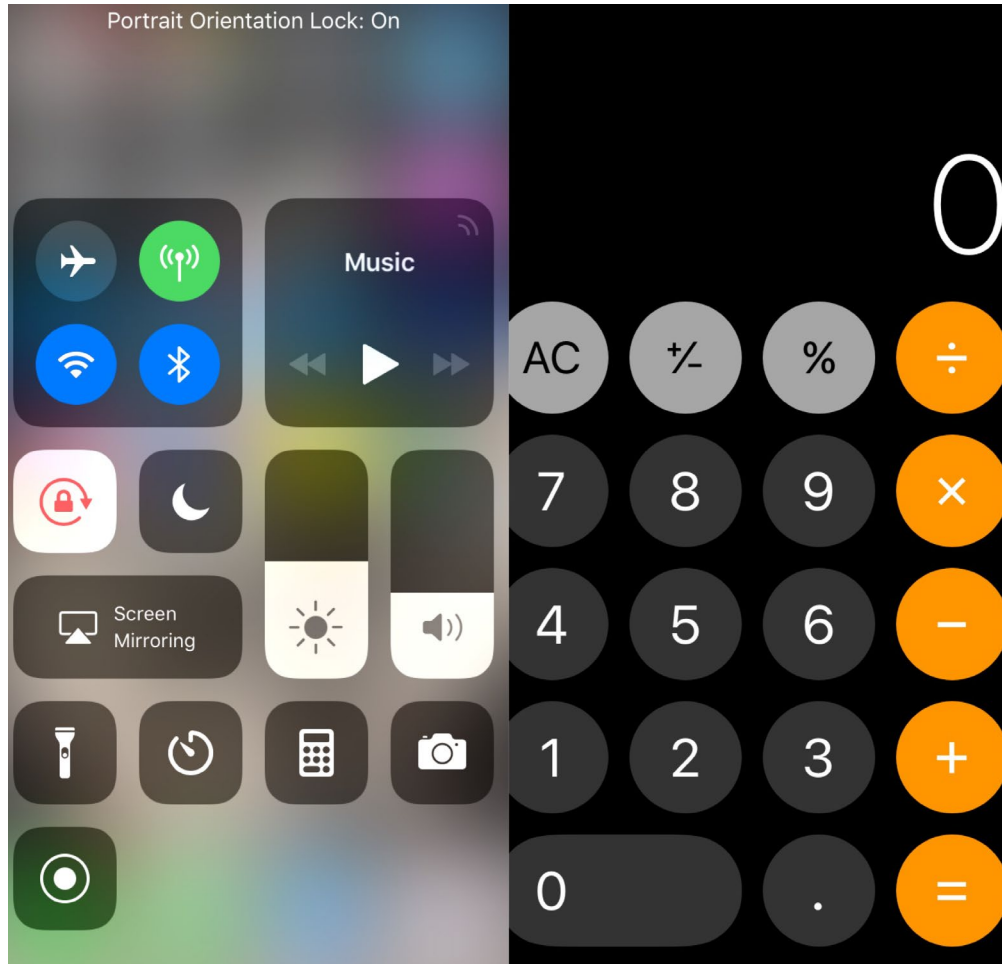


Some calculation applications have a graphing function that will not allow for an accurate assessment of this standard. While this function is NOT allowable under the Calculation Aids designated support policy, it is allowable under the STAAR Calculator Policy for grade 8 mathematics, grade 8 science, Algebra I, Algebra II, and biology.

Examples of Basic (i.e., Four-Function) Handheld Calculators



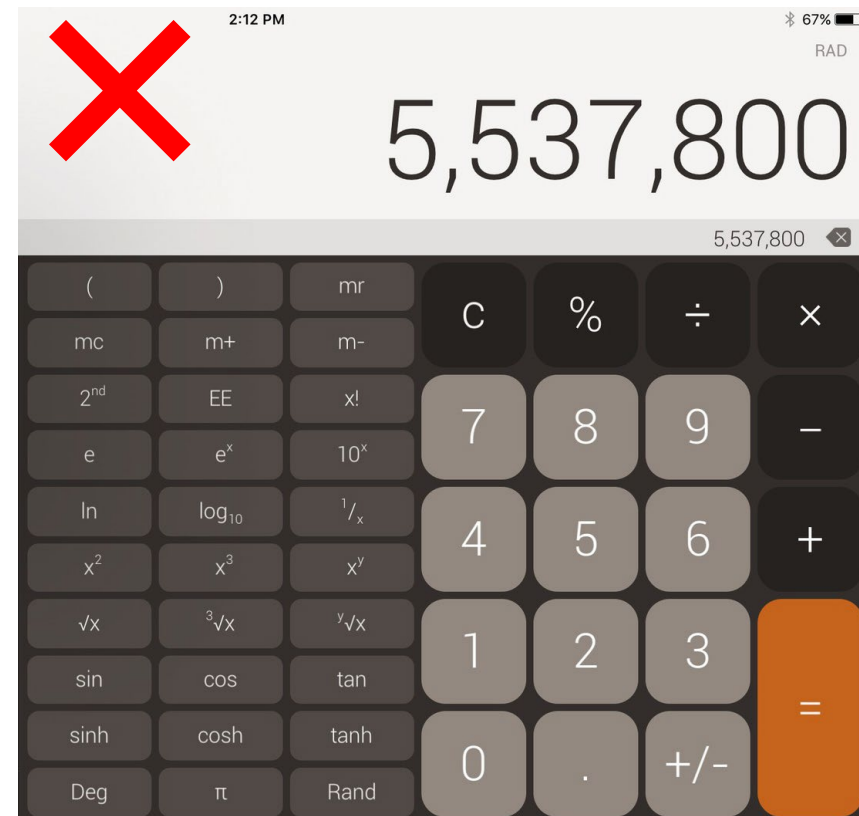
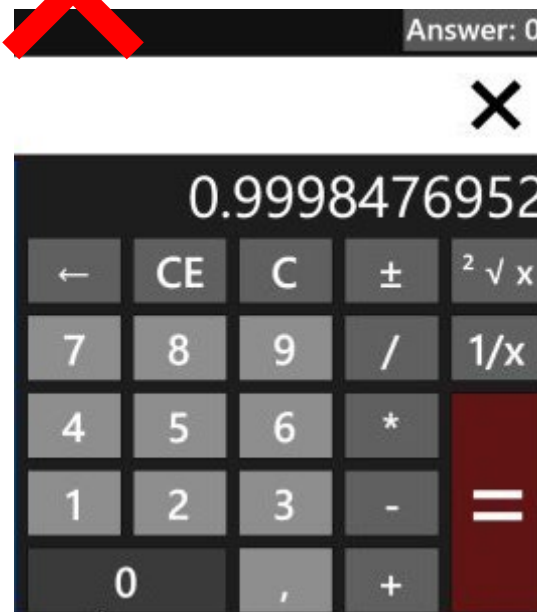
Examples of Basic (i.e., Four-Function) Calculator Applications



Examples of Handheld Calculators that are NOT Basic (i.e., Four-Function)



Examples of Calculator Applications that are NOT Basic (i.e., Four-Function)

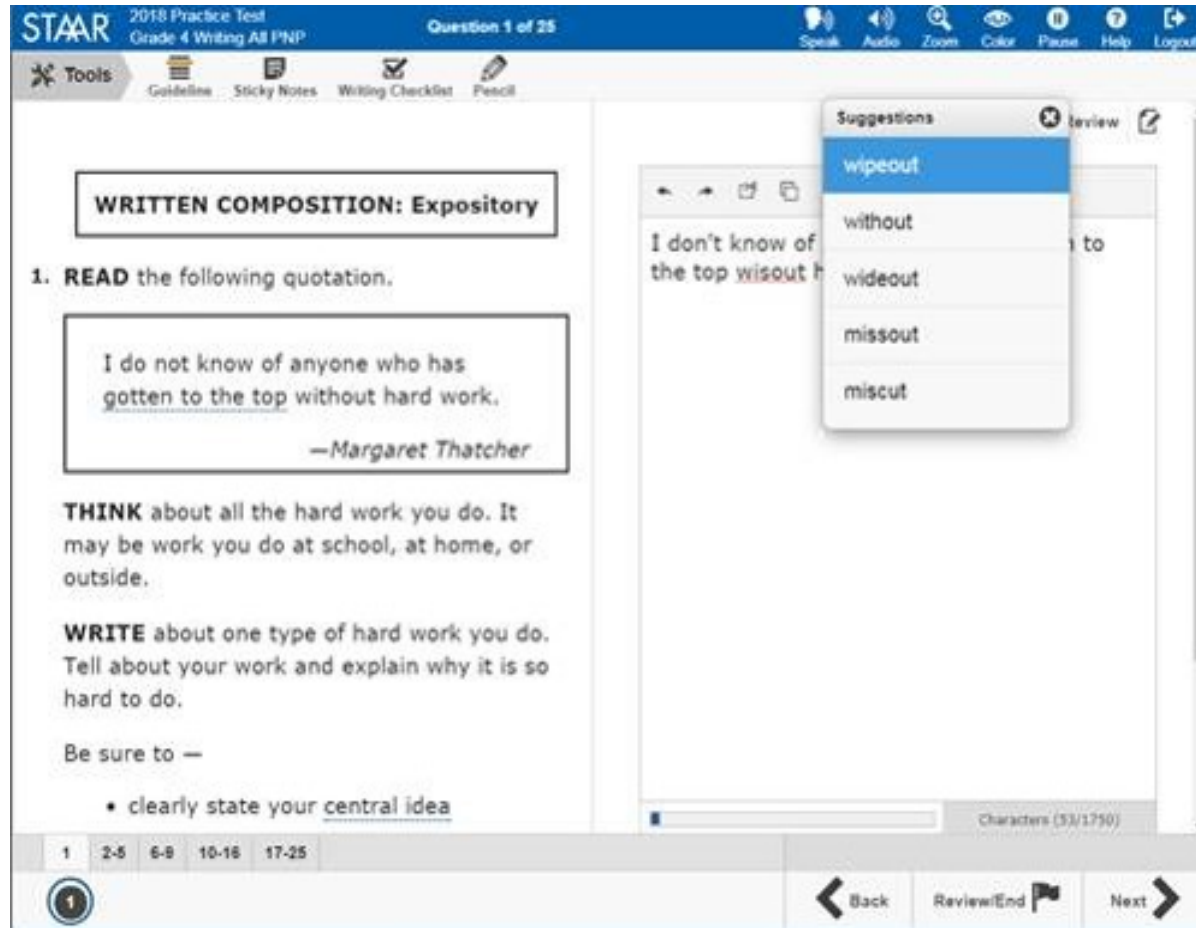


Spelling Assistance Designated Support Policy

- **For a student who meets the eligibility criteria, this designated support may be used only on**
 - STAAR grades 4 and 7 writing, English I, English II, and English III (written composition ONLY)
 - STAAR Spanish grade 4 writing (written composition ONLY)

- **This designated support may include only**
 - visual sound cards
 - frequently misspelled word list (e.g., student-made, teacher-made, commercially produced)
 - spell-check function on a word processor or as an online embedded support on STAAR
 - pocket spell-checker
 - word-prediction software
 - text-to-speech software or devices
 - speech-to-text software, applications, or devices

Online Embedded Spelling Assistance Tool



- When a word is not found in the dictionary source list, it will be flagged.
 - The tool provides up to five suggestions.
 - The tool evaluates the words independent of the context. It does not check for errors in grammar.
- The tool is available in a practice test in the STAAR Online Testing Platform.
- Not every student eligible for the spelling assistance designated support will use this PNP. Only students who routinely use a spell-check feature may benefit from this embedded support. Eligible students should practice using this support to determine if it meets their needs.
- Students may use any allowable examples or types of spelling assistance listed in the designated support policy document in lieu of or in addition to this online embedded support.

Spelling Assistance: Features NOT Allowed

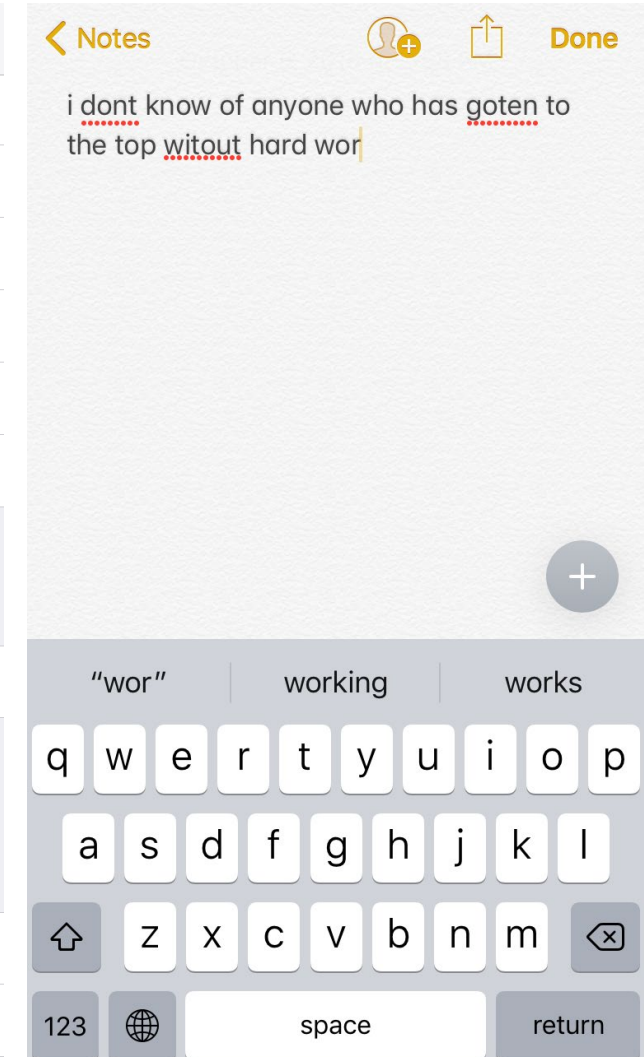
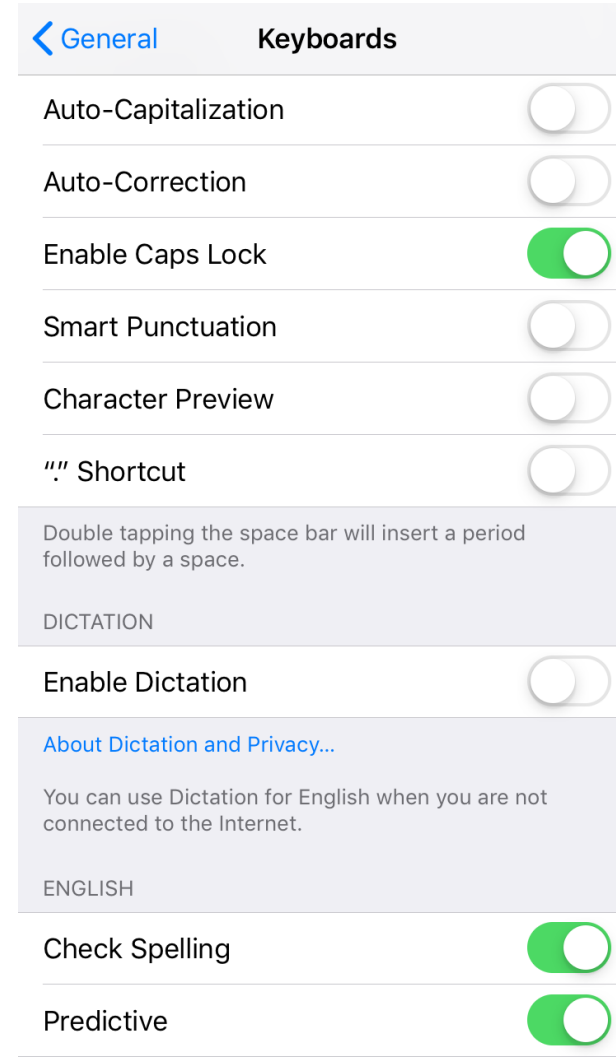
An eligible student may use spelling assistance technology (i.e., spell check, pocket spellchecker, word prediction, text-to-speech, speech-to-text) outside of the testing platform if he/she routinely uses this designated support in instruction. This may be in the form of an application on a tablet or software on a desktop or laptop. Features that must be disabled or made unavailable as outlined in the [Technology Guidelines](#) for eligible students receiving this designated support include:

- any feature that will edit or aid a student's response in areas other than spelling, such as automatic capitalization and punctuation, or grammar check;
- any feature that will save a typed response (if a spelling assistance software requires a student's response to be temporarily saved, the district must ensure the file is permanently deleted after the administration);
- any feature that will allow the ability to share/e-mail response;
- internet capabilities (if a spelling assistance software requires an internet connection to function, it should be set in a mode that prevents the student from accessing an internet browser or accessing any other aids beyond the allowed supports);
- translation services; and
- any feature that will allow the ability to access other programs/features not allowed on the device.

Spelling Assistance: Disabling Features that are NOT Allowed



- This is an example of a tablet's keyboard settings which allow you to disable features that are NOT allowed and to select the features that ARE allowed.
- For assistance on how to disable features on your specific application, perform a web search or contact your district's IT department or region service center's assistive technology representative.



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