# Guide to the Sample Tests

## AzMERIT

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*Prepared by the Arizona Department of Education and the American Institutes for Research®*

# Table of Contents

# Introduction to This Guide

This user guide provides information for individuals accessing the AzMERIT computer-based Sample Tests. This introduction describes the contents of this user guide and includes a key for identifying icons and elements used.

## Guide Sections

Each section begins on a new page, which allows for easy printing.

- Section I. Purpose of Sample Tests provides information about the intended use for the Sample Tests.

- Section II. Logging In to the Sample Test Site provides information on how to log in and select a Sample Test.

- Section III. Overview of Sample Test Features includes information about a Sample Test layout, global and context menus, and the test tools that are available.

- Section IV. Keyboard Navigation provides keyboard commands for general test navigation as well as for specific features.

- Section V. Item Types on Computer-Based Tests (CBT) gives an overview of the item types that students may see on the Sample Tests and general guidelines on how to respond to items.

- Section VI. Writing Guides for English Language Arts (ELA) includes the ELA Writing Guides that students will be able to use during the test administration.

- Section VII. Calculator Guidance—Math provides information on the use of calculators on the AzMERIT tests.

- Section VIII. Paper-Based Testing (PBT) provides information on the Paper-Based version of the Computer-Based AzMERIT tests, including sample item formats.

Table 1. Key Icons and Elements found in this User Guide

| Icon | Description |
|---|---|
|  | This symbol accompanies helpful information or reminders. |
| **[Text]** | Text in brackets is used to indicate a link or button that is clickable. |

# Section I. Purpose of Sample Tests

The AzMERIT Sample Tests are a valuable resource for students and families, as well as district and school administrators and educators. The purpose of the Sample Tests is to allow various users to become familiar with the AzMERIT Computer-Based Testing (CBT) system and the different item types used on the AzMERIT assessment. It is important that students who will take the CBT AzMERIT test have an opportunity to take a CBT Sample Test prior to testing so they may become familiar with the types of questions they will encounter and the various tools available to use throughout the tests.

Anyone can access and take a CBT Sample Test by logging in as a guest user on the Sample Test page on the AzMERIT portal. Schools may also administer the Sample Tests using the Secure Browser in order to practice starting a test session and logging students into the CBT system.

**New for Spring 2017:**

- Computer-Based Sample Tests are **available by grade/EOC test** for Writing, Reading and Math.
- The Writing Sandbox is a new tool in the sample test area that allows students to practice typing responses using the same format as the AzMERIT ELA Writing assessment. The Writing Sanbox can be used for typing responses to classroom prompts, working on keyboarding skills, or becoming familiar with the writing toolbar.

While the Sample Tests do present the various types of items students will encounter on the AzMERIT tests, the Sample Tests are **not** to be used as a predictor of performance on upcoming AzMERIT tests. The best way to prepare students is standards-based instruction. All of the items on AzMERIT are aligned to the Arizona K-12 Academic Standards for English Language Arts/Literacy and Math for each particular grade level. Answer keys are provided; however, responses on the sample tests will not be scored. More information on the standards and the AzMERIT testing structure and blueprint can be found on the Arizona Department of Education website at http://www.azed.gov/assessment/azmerit/.
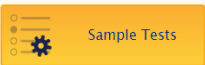
Certain item types on the CBT will be rendered differently on the Paper-Based Test (PBT). To view the various item types that will be on the PBT, other than multiple choice, please refer to Section VIII—Paper-Based Testing.

Each grade and subject sample test has an accompanying document that provides an answer key or exemplar for each item. These documents are available to download and print from the Sample Test landing page on the AzMERIT portal.

# Section II. Logging In to the Sample Test Site

Users must use a supported web browser to access the Sample Tests. See the Supported Browsers page on the AzMERIT portal for this information.

The instructions in this section are to be used when logging into the Sample Tests as a guest. For schools that want to access the Sample Tests using the Secure Browser, detailed instructions can be found in the *Test Administrator (TA) User Guide*, which can be found on the portal at http://azmeritportal.org/resources/?section=2.

1. Open a supported web browser on your computer or tablet.

2. Navigate to the AzMERIT portal (http://azmeritportal.org/).

3. Click [Sample Tests icon]. The Sample Test landing page will be displayed.

4. Click [**Take the Sample Tests**].

*Sample Test Landing Page*

5. Make sure *Guest User* and *Guest Session* are both checked on the login page and click [**Sign In**].

*Login Page*



a. After clicking [**Sign In**], the ***Is This You?*** page will be displayed.

6. **Select a grade level.**

*Is This You Page*



a. From the *Student Grade Level* drop-down list, select HS ELA, HS Math, or a grade.

b. Click [**Yes**]. The ***Your Tests*** page will be displayed.

7. **Select an available test.**

The list of available tests depends on the grade level selected.

*Your Tests Page*

**Student Sample Test**

**Your Tests**
Select the test you need to take.

**ELA**

➡ **Start Sample G6 ELA Writing**
This is opportunity 1 of 99

➡ **Start Sample G6 ELA Reading**
This is opportunity 1 of 99

**Math**

➡ **Start Sample G6 Math**
This is opportunity 1 of 99

**Tests**

➡ **Start Writing Sandbox**
This is opportunity 1 of 99

**Next Step:**
If you do not see the test you need to take, notify your Test Administrator and select **Back to Login**.

Back to Login

8. The *Choose Settings* page will appear.

**Note:** If the test you want to take is not displayed, click [**Back to Login**]. You will be logged out. Sign in again and select a different grade level.

9. **Choose your test settings.**

*Choose Settings Page*

**Choose Settings:**
Review the following test settings. You can change the options, if necessary.

**Sample G6 Math**

Color Contrast: Black on White (default) ▾

Mouse Pointer: System Default ▾

Text-to-Speech: Instructions ▾

Print Size: No default zoom applied ▾

**Next Step:**
To test with these settings, choose **Select**. To select a different test, choose **Go Back**.

Select   Go Back

a. Review the information on this page and verify that your test settings are correct.

- If the test name or test settings are incorrect, you may change them on this page.

- If the test name and test settings are correct, click [**Select**] when you are ready to begin.

10. **Verify your test and test settings.**

   a. Confirm test and settings. If these are correct, click **[Yes]**.

   b. Click **[No]** to return to the login page.

   c. If you chose an ELA Reading test, you will see the **Audio Playback Check** page.

      - If you can hear the sound, click [**I heard the sound**].

      - If you cannot hear the sound, click **[I did not hear the sound].** You may click **[Try Again]** to try the audio playback check again, or you may click **[Log Out]** to log out and adjust your device's audio settings.

11. **Check Text-to-Speech**
   a. On the Text-to-Speech Sound Check page, click the green speaker icon to make sure you can hear the voice.
      - If you hear the voice, click **[I heard the voice].**
      - If you cannot hear the voice, use the sliders to adjust the volume, pitch or rate and then click the green speaker icon again.
      - If you still cannot hear the voice, click [I did not hear the voice]. You may click **[Try Again]** to try the Text-to-Speech sound again, or you may click **[Log Out]** to log out and adjust your device's audio settings.


12. **On the *Instructions and Help* screen, review the information as necessary, and then click [Begin Test Now].**

# Section III. Overview of Sample Test Features

This section provides an overview of what a test page might look like. Information about available test tools and how to access them is also provided.

## Test Layout

This sample image for an ELA test shows the primary features and available tools.



Each test has two major sections:

- **Global Menu bar** (contains global tools and navigation buttons, as well as the help button)

- **Test Content** (displays test content, including stimuli and items)

  - Some tools are available only by accessing a context menu for that passage or stimulus, item, or selected-response option. For more information, see the Context Menus and Test Elements section below.

## Global and Context Menus

The Global and Context Menus allow students to access on-screen tools. These tools can be accessed using a mouse or keyboard shortcuts. On tablets, the context menus are accessed via a Menu button. For information about keyboard shortcuts, refer to Section IV. Keyboard Navigation.

### Global Menu

The Global Menu contains all the visible tools displayed at the top of the student's test screen. Most universal tools, as well as the student help button, are in the Global Menu.

*Sample Global Menu*



## Context Menus and Test Elements

Tools such as the highlighter and strikethrough option are accessed using context menus. The context menus contain the options available for each area of a test item on a page. These areas are called *elements*.

*Overview of Elements for Multiple-Choice Items*



Each element has its own context menu. Elements include passages or prompts, test items, and answer options (A, B, C, and D). Each answer option is a single element.

**Opening a Context Menu**

To view the context menu for an element using a mouse, simply right-click in that area. The context menu for that element will appear. (If students are using a single-button mouse, they should press the [**Ctrl**] key on the keyboard and then click.

The context menu options vary depending on the following:

- The element type (passage, question, or answer option).

- The tools available to students.

- The test the student is taking.

*Sample Context Menu for Questions*



*Sample Context Menu for Answer Options*

# General Test Tools

The following test tools are available:

- **Global Tools:** Global tools are those that appear at the top of the screen in the gray banner.

- **Stimulus/Question Tools:** These tools are specific to stimuli and questions and are accessed by clicking icons above an item or by right-clicking in the stimulus, question, or answer option areas.

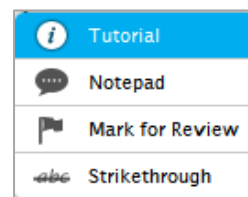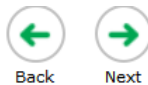| Global Tools | Description |
|---|---|
| **Help  button** | The [**?**] button at the top right will open the on-screen *Test Instructions and Help Guide* window. |
| **Navigation buttons** | The [**Back**] and [**Next**] buttons in the top left corner permit you to move between pages on a test. <br><br>• For *Math* tests and *ELA Reading* tests, clicking the navigation buttons will permit you to move between questions. <br><br>• For *ELA Writing* tests, clicking [**Next**] will prompt you to end the test. |
| **Questions drop-down list** <br> Questions: 1 - 9 ▼ | This feature enables you to quickly return to a specific test page. Questions that were marked for review will display "(marked)." |
| **Question buttons** <br> 1  2  3  4  5 | Some passages have multiple test questions. You can move between questions by using the [**Question**] buttons at the top right of the screen. |
| **Save button** *(Optional)* | The [**Save**] button allows you to manually save technology-enhanced questions. This is an optional feature. If you do not click this button, your answers will still be saved automatically. |
| **Pause button** | The [**Pause**] button allows you to pause and exit the test. |
| **Notes button** | Click the [**Notes**] button to open an on-screen notepad. You can enter notes for yourself and save them. These notes are global and will remain in the pop-up window throughout the test. <br><br>*Note: The Notes tool is only available for the ELA tests.* |
| **Zoom buttons** | Use the [**Zoom In**] and [**Zoom Out**] buttons to increase and decrease the size of text and graphics within a single test page. Four levels of magnification are available. |

| Global Tools | Description |
|---|---|
| **Line Reader button** | Use the [**Line Reader**] button to highlight a single line of text at a time in passages and questions. |
| **Dictionary/Thesaurus button** | Search the Merriam-Webster dictionary or thesaurus without leaving the test. (Writing test only) |
| **Calculator button** | Click the [**Calculator**] button to open the on-screen calculator. *Note: The calculator is available only for Part I of the Grades 7–8 Math and Parts I and II of the End-of-Course (EOC) Math tests.* |
| **End Test button** | Click this button to begin the process of submitting the test. |

| Stimulus/Question Tools | Description |
|---|---|
| **American Sign Language** | To view audio content translated into American Sign Language via an on-screen video, select American Sign Language from the context menu. *Note*: This tool is available only for listening items, and the setting must be selected in in the Sample Test TA Interface when the student logs in. |
| **Closed Captioning** | Stimuli with audio elements automatically display closed captions. *Note*: This tool is available only for listening items, and the setting must be selected in in the Sample Test TA Interface when the student logs in. |
| **Highlighter** | Highlight a section of text in a passage or test question. <ul><li>To highlight text, select text on the screen, right-click with the mouse, and select [**Highlight Selection**].</li><li>To remove all highlighting from the question, right-click anywhere on the question and select [**Reset Highlighting**].</li></ul> |
| **Mark for Review** | Select **Mark for Review** from the question context menu. The question is labeled "(marked)" in the *Questions* drop-down list. To remove the (marked) status, select **Unmark Review Question**. |
| **Student Comments** | Each Math question has a tool that allows you to save a comment about the question. To access this tool, select **Notepad** from the question context menu. *Note: The Notepad tool is only available for the Math tests.* |

| Stimulus/Question Tools | Description |
|---|---|
| **Paginated Stimuli Buttons** | Paginated Stimuli is a new feature that allows students to view passages using page-turning navigation rather than a vertical scroll bar.<br><br>Passages are presented on the left side of the page. You can expand and passage across the page.<br><br>• To expand the passage, click the book icon.<br><br>• To collapse the expanded passage, click the close book icon.<br>• To navigate through pages in the passage, use the forward arrow and back arrow buttons. |
| **Expand Question Button (only visible when Paginated Stimuli is turned to On)** | When the Paginated Stimuli feature is turned on, use the expand question icon to expand the question across the page. |
| **Expand Buttons (only visible when Paginated Stimuli is turned to Off)** | When the Paginated Stimuli feature is turned off, you can expand the passage section or the question section for easier readability.<br><br>• To expand the passage section, select the right arrow icon →| below the global menu. To collapse the expanded passage section, select the left arrow icon |← .<br><br>• To expand the question section, select the left arrow icon |← below the global menu. To collapse the expanded question section, select the right arrow icon →| . |
| **Strikethrough** | For multiple-choice questions, you can "eliminate" an option and focus on the options they think may be correct.<br><br>• To *strikethrough* an answer option, right-click on the option and select [**Strikethrough**]. A line will appear through the text or image*.*<br><br>• To *remove the strikethrough* from an answer option, right-click on the option and select [**Undo Strikethrough**]. |
| **Tutorial** | Each question has a tutorial video that you can watch to learn more about responding to that type of question. To view the tutorial video, select **Tutorial** from the question context menu. |
| **Text-to-Speech** | Listen to test questions and answer options.<br>This feature is only available for students that require a read aloud accommodation, and for whom Accommodated Text to Speech has been indicated in TIDE or the TA Interface prior to testing. |

| Stimulus/Question Tools | Description |
|---|---|
| **Writing Guide** | View the on-screen writing guide (Writing tests only). |

# Section IV. Keyboard Navigation

Any student using a desktop, laptop, or Chromebook can use keyboard commands to navigate between test elements, features, and tools. Keyboard commands are not available for tablets.

**Note:** Keyboard commands require using the primary keyboard. If your keyboard contains a numeric keypad (often on the right side), do not use the keys in that area.

## Keyboard Commands for Test Tools

Students can use these commands to navigate between test elements, features, and tools.

| Button/ Image | Description of Function | Keyboard Commands |
|---|---|---|
| | Open the **GLOBAL MENU** | [**Ctrl**] + [**G**] |
| → | Go to the **NEXT** test page | [**Ctrl**] + [**→**] (or use the Global Menu) |
| ← | Go to the **PREVIOUS** test page | [**Ctrl**] + [**←**] (or use the Global Menu) |
| | Move to the **NEXT ELEMENT** (on a page containing multiple test questions and/or a reading passage; on the writing test you will need to use the space bar if you want to indent a paragraph.) | [**Tab**] |
| | Move to the **PREVIOUS ELEMENT** (on a page containing multiple test questions and/or a reading passage) | [**Shift**] + [**Tab**] |
| Ⓐ | Select **OPTION A** | [**Tab**] to move between answer choices. [**Space**] to select it as an answer. |
| Ⓑ | Select **OPTION B** | |
| Ⓒ | Select **OPTION C** | |
| Ⓓ | Select **OPTION D** | |
| 🔍+ | **ZOOM IN** (increase the size of text and graphics on a page) | [**Ctrl**] + [**G**] (via Global Menu) |
| 🔍- | **ZOOM OUT** (decrease the size of text and graphics on a page) | [**Ctrl**] + [**G**] (via Global Menu) |
| 📝 | Open the global **NOTES** tool (ELA Reading and ELA Writing only) | [**Ctrl**] + [**G**] (via Global Menu) |
| 🔢 | Open the **CALCULATOR** (Grades 7, 8 and EOC Math tests only) | [**Ctrl**] + [**G**] (via Global Menu) |

| Button/ Image | Description of Function | Keyboard Commands |
|---|---|---|
| | **PAUSE** your test | [**Ctrl**] + [**G**] (via Global Menu) |
| | **END TEST** and submit it | [**Ctrl**] + [**G**] (via Global Menu) |
| | **SCROLL UP** in an area of the test page | [ ↑ ] |
| | **SCROLL DOWN** in an area of the test page | [ ↓ ] |
| | **SCROLL** to the **RIGHT** in an area of the test page | [→] |
| | **SCROLL** to the **LEFT** in an area of the test page | [←] |
| | Open the **CONTEXT MENU** (for the selected passage, question, or answer option) | [**Ctrl**] + [**M**] |
| | Open a **TUTORIAL** to view information about that question type | [**Ctrl**] + [**M**] (via Context Menu) |
| | Open the question **STUDENT COMMENTS** to enter a comment about that question (Math tests only) | [**Ctrl**] + [**M**] (via Context Menu) |
| | **MARK/UNMARK** a question for review | [**Ctrl**] + [**M**] (via Context Menu) |
| | **HIGHLIGHTER** (highlight text on the page) | [**Ctrl**] + [**M**] (via Context Menu) |
| | **STRIKETHROUGH** an answer option | [**Ctrl**] + [**M**] (via Context Menu) |
| | Open the **WRITING GUIDE** | [**Ctrl**] + [**M**] (via Context Menu) |

## Keyboard Commands for Test Selection Screens and Messages

Use these keyboard commands to select options on the login screens or on pop-up messages that appear during the test. For example, if you see a screen that has [**No**] or [**Yes**] buttons, you can use these keyboard commands to navigate between the buttons and select one.

| Keyboard Command | Function |
|---|---|
| [Tab] | Move to the next option |
| [Shift] + [Tab] | Move to the previous option |
| [Enter] | Select the shaded option |

## Opening the Global Menu

To access the Global Menu with keyboard commands:

1.  Press the [**Ctrl**] + [**G**] keys to view the Global Menu. The menu will appear on the screen.

2.  Use the **Up** or **Down** arrow keys on your keyboard to move between options in the menu. Each option will be highlighted as you arrow up or down.

3.  Press the [**Enter**] key to select the highlighted menu option.

4.  Press the [**Esc**] key to close the Global Menu.

## Opening the Context Menus

To access Context Menus with keyboard commands:

*Navigating to an Element*

1.  Press the [**Tab**] key to navigate between questions, the answer options, and the reading passage.

*Opening a Context Menu for an Element*

1.  Press the [**Ctrl**] + [**M**] keys on the keyboard. The Context Menu for that element will appear.

2.  Use the **Up** or **Down** arrow keys on your keyboard to move between options in the menu. Each option will be highlighted as you arrow up or down.

3.  Press the [**Enter**] key to select the highlighted menu option.

4.  Press the [**Esc**] key to close the Context Menu.

## Keyboard Commands for Grid Items

Interactive items with an Add Point, Add Line or Add Arrow tool may have up to three main sections:

- Answer Space (the large area that takes up the most space)

- Action Button Row (at least one action button such as [**Add Point**] will be present at the top)

- Object Bank (a section on the left that includes objects to move to the Answer Space)

*Figure 1. Sample Item with Point and Line Tools*



*To move between the main sections (Object Bank, Button Row, and Answer Space)*

- Press the [**Tab**] key. Navigation is "clockwise" (from top to right to bottom to left).
- To move counter-clockwise, press [**Shift**] + [**Tab**].
- The "active" space or button will have a border.

*To add an object from the Object Bank to the Answer Space:*

- Make sure the Object Bank is active.
- Use the up and down arrows to move between available objects. The selected object will have a blue background.
- Press the [**space bar**] to add the selected object to the Answer Space.

*To select an Action Button and place the object (point or line) in the Answer Space:*

- Make sure the Button Row is active.
- Use the left or right arrow keys to move between action button options.
- Press [**Enter**].
- Press the [**space bar**] to apply the dot, arrow, or line to the Answer Space.

*To move objects, points, lines, and arrows around in the Answer Space:*

- Make sure the Answer Space is active.
- Press [**Enter**] to move between objects in the Answer Space. The selected object will have a border.
- Press the [**space bar**], then use the arrow keys to move the object.

*To delete objects, points, lines, and arrows in the Answer Space:*

- Make sure the Button Row is active.

- Press the left or right arrow to select the [**Delete**] button. The active button will turn white.

- Press [**Tab**] to move to the Answer Space.

- Press [**Enter**] to move between objects in the Answer Space. The selected object will have a border.

- Press the [**space bar**] to delete the object.

# Section V. Item Types on Computer-Based Tests

This section contains sample item types that appear on the Sample Tests for AzMERIT. The following item types appear: editing task, grid, hot text, multiple-choice, multi-select, open-response, writing prompt, and equation.

**Note about technology-enhanced item types:**

Students can manually save their answer before moving to the next item on the test. A [**Save**] button will appear at the top of the screen for these items. If students do not click [**Save**], the system will automatically save the responses when they move on to the next item or pause the test.

## Editing Task Items

To answer responses for editing task items, click the highlighted word or phrase. (Typically, the highlighted word or phrase will have a light green background.)

Some editing task items require you to enter the replacement word or phrase.

Other editing task items require you to select the replacement word or phrase from a menu.



## Evidence-Based Selected Response Items

This type of item has multiple parts. All parts of the question should be answered. In ELA, this item type will be accompanied by a passage on the left side of the screen.

## Grid Items with Action Buttons

Grid items require using point, line, or arrow buttons to create a response.

*To add a point,* click the [**Add Point**] button and then click on the location in the grid where the point should appear.

*To add a line or arrow,* click the [**Connect Line**] or [**Add Arrow**] button and then click on the desired beginning and end points of the line in the grid.

*To delete a point, line, or arrow,* click the [**Delete**] button and then click on the object you want to remove. (Clicking on a point will also remove adjacent lines.)



*Note: The "active" action button is white.*

## Hot Text Items

Hot Text items require you to either click on a response option or drag a response option to another location.



## Multiple-Choice Items

Multiple-choice items require you to select a single answer option.

**Note:** You may click anywhere on the answer or click in the circle that contains A, B, C, or D. The selected answer circle will darken.



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## Multi-Select Items

Multi-select items allow you to select more than one answer option. These are different from multiple-choice items, which allow you to select only one response.

**Note:** Some items may ask you to select a specific number of responses.

**12**

Select the values that are greater than or equal to ½.

☐ 0.6
☐ 2/6
☐ 5/8
☐ .5
☐ .45
☐ One Fifth
☐ 2/10

Click the checkbox next to each option you want to select as a response. You may select more than one option.

## Open-Response Items

Open-response items require you to use the keyboard to enter the response into a text field.

Different types of open-response items may appear on the test.

**12**

What is the resolution of the story?

Type your answer in the space provided.

Click in the text box and type your answer using the keyboard.

## Writing Prompt Items

Writing prompt items will require you to use features of an online word processor. You can perform various tasks within the online word processor such as bold text, use bullet points, underline, etc. In order to indent a paragraph, you must press the space bar at least 5 times.

**1**

Write about your favorite birthday memory.

Formatting Buttons    Numbering, Bullets, & Indent    Cut, Copy, Paste, Undo, & Redo    Insert Symbol

B  I  U  $I_x$    ☰ ☰ ☰ ☰    ✂ ☐ ☐ ↶ ↷    Ω

Response area

## Equation Items

Equation items require you to enter a valid statement that answers the question, such as *y=3x+2*.

To enter an equation, click the button for each letter or symbol. The equation entered will be in blue text.

**4**

A salesperson earns $125 a day, plus a commission of 5% of the price of each item she sells. The salesperson sold one item yesterday that was $750.

Create an equation that can be used to determine the amount of money the salesperson earned yesterday.

$y=$ [ Equation response field ]

← → ↶ ↷ ⌫    ← Navigation buttons

1 2 3  x y
4 5 6  + − • ÷
7 8 9  < ≤ = ≥ >    ← Special symbols (fraction, exponent, square root, etc.)
0 . −  ☐ ☐ ☐ () || √☐ ∜☐ π

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*About the Navigation Buttons for Equation Items*

| Navigation Button | Description |
|---|---|
| **Move Left** | The straight left arrow button allows you to move the cursor before an existing character. |
| **Move Right** | The straight right arrow button allows you to move the cursor after an existing character. |
| **Undo** | The curved left arrow button allows you to undo the previous action. |
| **Redo** | The curved right arrow button allows you to redo the previous undone action. |
| **Delete** | The delete button allows you to delete characters. |

*About Special Symbols*

Special symbols are easiest to use if entered prior to inserting text. To add a special symbol to an equation, select the corresponding button. After entering a number or symbol, use the "Move Left" and "Move Right" buttons to move the cursor between fields.

| Special Symbol | Description |
|---|---|
| **Fraction** | This symbol allows you to enter a **fraction** into the equation editor. Select the numerator, then navigate to the denominator, and then select the value for that field. |
| **Exponent** | This symbol allows you to enter an **exponent** into the equation editor. After you enter the base number, select the exponent button, and then enter the exponent number. |
| **Subscript** | This symbol allows you to enter a **subscript** into the equation editor. After you enter the base number, select the subscript button, and then enter the subscript number. |
| **Parentheses** | This symbol allows you to enter **parentheses**. Once you select the symbol, the parentheses will appear in the equation editor. Then select the numbers and symbols that should appear between the open and close parentheses. |
| **Absolute Value** | This symbol allows you to enter an **absolute value**. Once you select the symbol, the lines will appear in the equation editor. Then select the numbers and symbols that should appear between the lines. |
| **Square Root** | This symbol allows you to enter a **square root** value. Once you select the symbol, the radical sign will appear in the equation editor. Enter the number that should appear under the radical sign. |

| Special Symbol | Description |
|---|---|
| **n<sup>th</sup> Root** | This symbol allows you to enter an **n<sup>th</sup> root** value. Once you select the symbol, the radical sign will appear in the equation editor. Enter the number that should appear under the radical sign. Use the straight left arrow to navigate to the n<sup>th</sup> field and enter the number that should appear there. |

# Section VI. Writing Guides for English Language Arts (ELA)

The AzMERIT ELA test will have a Writing part and a Reading Part 1 and Part 2 for all grade levels. The structure of the sample AzMERIT writing test is similar to the actual AzMERIT writing test. Each writing test will have one or more passages that relate to a prompt. Students will create a written response to the prompt. Students will not answer comprehension questions about the prompt. Scratch paper is permitted on both the CBT and PBT writing tests in order for students to compose a rough draft prior to formulating a "final" copy in the paper booklet or in the word processing area on the computer.

*CBT*— On the CBT writing tests students will have access to one or more passages that relate to a prompt, an electronic version of the Writing Guide and a word processing area to type their "final" response.

*PBT*— On the PBT the students will have access to one or more passages that relate to a prompt, a print copy of the Writing Guide and a "final" copy area to write their response. On paper, the Writing Guide will also appear after the writing prompt and before the final copy area on the PBT. On the PBT, there will be three final copy pages with a line spacing of .375" for grades 3 and 4 (wide ruled) and .3" for grades 5–11 (college ruled).

The next several pages of this section contain Writing Guides for each grade-level band that will be available to students on AzMERIT.

# Grades 3–5 Informative-Explanatory Essay Writing Guide

| Purpose, Focus, and Organization | Evidence and Elaboration |
|---|---|
| The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clearly stated controlling idea and effective organizational structure creating coherence and completeness. The response includes most of the following:<br><br>• Strongly maintained controlling idea with little or no loosely related material<br><br>• Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas<br><br>• Logical progression of ideas from beginning to end, including a satisfying introduction and conclusion | The response provides thorough and convincing support/evidence for the controlling idea or main idea that includes the effective use of sources, facts, and details. The response includes most of the following:<br><br>• Relevant evidence integrated smoothly and thoroughly with references to sources<br><br>• Effective use of a variety of elaborative techniques (including but not limited to definitions, quotations, and examples), demonstrating an understanding of the topic and text<br><br>• Clear and effective expression of ideas, using precise language<br><br>• Academic and domain-specific vocabulary clearly appropriate for the audience and purpose<br><br>• Varied sentence structure, demonstrating language facility |

| Conventions |
|---|
| The response demonstrates an adequate command of basic conventions. The response may include the following:<br>• Some minor errors in usage, but no patterns of errors<br>• Adequate use of punctuation, capitalization, sentence formation, and spelling |

# Grades 3–5 Opinion Essay Writing Guide

| Purpose, Focus, and Organization | Evidence and Elaboration |
|---|---|
| The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clearly stated opinion and effective organizational structure creating coherence and completeness. The response includes most of the following: | The response provides thorough and convincing support/evidence for the writer's opinion that includes the effective use of sources, facts, and details. The response includes most of the following: |
| • Strongly maintained opinion with little or no loosely related material<br><br>• Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas<br><br>• Logical progression of ideas from beginning to end with a satisfying introduction and conclusion | • Relevant evidence integrated smoothly and thoroughly with references to sources<br><br>• Effective use of a variety of elaborative techniques, demonstrating understanding of the topic and text<br><br>• Clear and effective expression of ideas, using precise language<br><br>• Academic and domain-specific vocabulary clearly appropriate for the audience and purpose<br><br>• Varied sentence structure, demonstrating language facility |

| Conventions |
|---|
| The response demonstrates an adequate command of basic conventions. The response may include the following:<br><br>• Some minor errors in usage, but no patterns of errors<br><br>• Adequate use of punctuation, capitalization, sentence formation, and spelling |

# Grade 6 Argumentative Essay Writing Guide

| Purpose, Focus, and Organization | Evidence and Elaboration | Conventions |
|---|---|---|
| The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clear claim and effective organizational structure creating coherence and completeness. The response includes most of the following: | The response provides thorough, convincing, and credible support, citing evidence for the writer's claim that includes the effective use of sources, facts, and details. The response includes most of the following: | The response demonstrates an adequate command of basic conventions. The response may include the following: |
| • Strongly maintained claim with little or no loosely related material<br><br>• Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas<br><br>• Logical progression of ideas from beginning to end with a satisfying introduction and conclusion<br><br>• Appropriate style and tone established and maintained | • Smoothly integrated, thorough, and relevant evidence, including precise references to sources<br><br>• Effective use of a variety of elaborative techniques to support the claim, demonstrating an understanding of the topic and text<br><br>• Clear and effective expression of ideas, using precise language<br><br>• Academic and domain-specific vocabulary clearly appropriate for the audience and purpose<br><br>• Varied sentence structure, demonstrating language facility | • Some minor errors in usage but no patterns of errors<br><br>• Adequate use of punctuation, capitalization, sentence formation, and spelling |

| References and Citations |
|---|
| When referring to evidence and information from passages, students should use paraphrasing and short quotations. To credit sources, students should use informal, in-text citations (e.g., MLA author or title tags). |

# Grades 6–8 Informative-Explanatory Essay Writing Guide

| Purpose, Focus, and Organization | Evidence and Elaboration | Conventions |
|---|---|---|
| The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clear controlling idea and effective organizational structure creating coherence and completeness. The response includes most of the following:<br><br>• Strongly maintained controlling idea with little or no loosely related material<br><br>• Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas<br><br>• Logical progression of ideas from beginning to end with a satisfying introduction and conclusion<br><br>• Appropriate style and objective tone established and maintained | The response provides thorough and convincing support, citing evidence for the controlling idea or main idea that includes the effective use of sources, facts, and details. The response includes most of the following:<br><br>• Smoothly integrated, thorough, and relevant evidence, including precise references to sources<br><br>• Effective use of a variety of elaborative techniques (including but not limited to definitions, quotations, and examples), demonstrating an understanding of the topic and text<br><br>• Clear and effective expression of ideas, using precise language<br><br>• Academic and domain-specific vocabulary clearly appropriate for the audience and purpose<br><br>• Varied sentence structure, demonstrating language facility. | The response demonstrates an adequate command of basic conventions. The response may include the following:<br><br>• Some minor errors in usage but no patterns of errors<br><br>• Adequate use of punctuation, capitalization, sentence formation, and spelling |

| References and Citations |
|---|
| When referring to evidence and information from passages, students should use paraphrasing and short quotations. To credit sources, students should use informal, in-text citations (e.g., MLA author or title tags). |

# Grades 7–8 Argumentative Essay Writing Guide

| Purpose, Focus, and Organization | Evidence and Elaboration | Conventions |
| --- | --- | --- |
| The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clear claim and effective organizational structure creating coherence and completeness. The response includes most of the following:<br><br>• Strongly maintained claim with little or no loosely related material<br><br>• Clearly addressed alternate or opposing claims<br><br>• Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas<br><br>• Logical progression of ideas from beginning to end with a satisfying introduction and conclusion<br><br>• Appropriate style and tone established and maintained | The response provides thorough, convincing, and credible support, citing evidence for the writer's claim that includes the effective use of sources, facts, and details. The response includes most of the following:<br><br>• Smoothly integrated, thorough, and relevant evidence, including precise references to sources<br><br>• Effective use of a variety of elaborative techniques to support the claim, demonstrating an understanding of the topic and text<br><br>• Clear and effective expression of ideas, using precise language<br><br>• Academic and domain-specific vocabulary clearly appropriate for the audience and purpose<br><br>• Varied sentence structure, demonstrating language facility | The response demonstrates an adequate command of basic conventions. The response may include the following:<br><br>• Some minor errors in usage but no patterns of errors<br><br>• Adequate use of punctuation, capitalization, sentence formation, and spelling |

| References and Citations |
| --- |
| When referring to evidence and information from passages, students should use paraphrasing and short quotations. To credit sources, students should use informal, in-text citations (e.g., MLA author or title tags). |

# Grades 9–11 Informative-Explanatory Essay Writing Guide

| Purpose, Focus, and Organization | Evidence and Elaboration | Conventions |
|---|---|---|
| The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clear controlling idea and effective organizational structure creating coherence and completeness. The response includes most of the following:<br><br>• Strongly maintained controlling idea with little or no loosely related material<br><br>• Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas<br><br>• Logical progression of ideas from beginning to end with a satisfying introduction and conclusion<br><br>• Appropriate style and objective tone established and maintained | The response provides thorough and convincing support, citing evidence for the controlling idea or main idea that includes the effective use of sources, facts, and details. The response includes most of the following:<br><br>• Smoothly integrated, thorough, and relevant evidence, including precise references to sources<br><br>• Effective use of a variety of elaborative techniques (including but not limited to definitions, quotations, and examples), demonstrating an understanding of the topic and text<br><br>• Clear and effective expression of ideas, using precise language<br><br>• Academic and domain-specific vocabulary clearly appropriate for the audience and purpose<br><br>• Varied sentence structure, demonstrating language facility | The response demonstrates an adequate command of basic conventions. The response may include the following:<br><br><br><br>• Some minor errors in usage but no patterns of errors<br><br>• Adequate use of punctuation, capitalization, sentence formation, and spelling |

| References and Citations |
|---|
| When referring to evidence and information from passages, students should use paraphrasing and short quotations. To credit sources, students should use informal, in-text citations (e.g., MLA author or title tags). |

## Grades 9–11 Argumentative Essay Writing Guide

| Purpose, Focus, and Organization | Evidence and Elaboration | Conventions |
|---|---|---|
| The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clear claim and effective organizational structure creating coherence and completeness. The response includes most of the following:<br><br>• Strongly maintained claim with little or no loosely related material<br><br>• Clearly addressed alternate or opposing claims<br><br>• Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas<br><br>• Logical progression of ideas from beginning to end with a satisfying introduction and conclusion<br><br>• Appropriate style and tone established and maintained | The response provides thorough, convincing, and credible support, citing evidence for the writer's claim that includes the effective use of sources, facts, and details. The response includes most of the following:<br><br>• Smoothly integrated, thorough, and relevant evidence, including precise references to sources<br><br>• Effective use of a variety of elaborative techniques to support the claim, demonstrating an understanding of the topic and text<br><br>• Clear and effective expression of ideas, using precise language<br><br>• Academic and domain-specific vocabulary clearly appropriate for the audience and purpose<br><br>• Varied sentence structure, demonstrating language facility | The response demonstrates an adequate command of basic conventions. The response may include the following:<br><br>• Some minor errors in usage but no patterns of errors<br><br>• Adequate use of punctuation, capitalization, sentence formation, and spelling |

| References and Citations |
|---|
| When referring to evidence and information from passages, students should use paraphrasing and short quotations. To credit sources, students should use informal, in-text citations (e.g., MLA author or title tags). |

# Section VII. Calculator Guidance—Math

The AzMERIT calculator guidance was determined with the input of Arizona educators who have reviewed AzMERIT items. The guidelines were determined to provide appropriate support for students while still measuring a student's mastery of the standards.

These guidelines are for the assessment only. They are not intended to limit instruction in the classroom. Technology is a part of the Arizona College and Career Ready Standards and students should still be interacting with technology as appropriate for engaging with and learning the standards.

The applicable portion of the CBT will include the acceptable online version of approved calculator. Providing handheld calculators is not a requirement for schools choosing the CBT. However, students may use an acceptable handheld calculator in addition to or instead of the online calculator.

| Grades | Calculator Usage on AzMERIT Assessments |
|---|---|
| Grades 3–6 | **No calculators permitted on AzMERIT.** |
| Grades 7–8 | **Scientific Calculator permitted on AzMERIT Math Part 1 only. No calculators permitted on AzMERIT Math Part 2.**<br><br>Scientific calculator should include these functions: standard four functions (addition, subtraction, multiplication, division), decimal, change sign (+/-), parentheses, square root, and π.They may NOT include any problem solving or programming capabilities, place values, and inequalities.<br><br>Sample acceptable calculator: TI-30X IIS or similar. |
| **High School End-of-Course Tests** | **Graphing calculators permitted on AzMERIT Math Part 1 and Part 2.**<br><br>No calculators with Computer Algebra System (CAS) features are allowed. Calculators may NOT be capable of communication with other calculators through infrared sensors. NO instruction or formula cards, or other information regarding the operation of calculators such as operating manuals are permitted. The memory of any calculator with programming capability must be cleared, reset, or disabled when students enter the testing room. If the memory of any calculator is password protected, and cannot be cleared or reset, the calculator may NOT be used.<br><br>Sample acceptable calculators: TI-84 Plus, Casio FX-9750GII, or similar. |

- No laptop, tablet, or phone based calculators will be allowed during the AzMERIT assessment, with the exception of a laptop or tablet being used to access the secure calculator available on the AzMERIT portal.
- Students are not allowed to share calculators during a testing session.

*New for Spring 2017*: Desmos® calculators that have been modified for use with the AzMERIT assessments are embedded in the computer-based math test parts that allow the use of a calculator. Students will access the calculators in the same manner they accessed the previous versions of the calculators.

# Section VIII. Paper-Based Testing (PBT)

## Consumable Booklets

AzMERIT is a Computer-Based Test (CBT). However, a Paper-Based Test (PBT) is available for schools that opted out of the CBT. The PBT will consist of consumable test booklets. This means that there will be *no separate answer documents*; students will answer the questions *directly* in the test booklets, and the test booklets will be scanned in their entirety by the vendor.

Some technology-enhanced items are converted for use on the Paper-Based Tests. Below are samples of various item types that will appear on the Paper-Based version of AzMERIT. This section also includes sample "Final Copy" pages from the Paper-Based Writing Test.

## Sample Paper Items—ELA

While some items in the ELA portion of the test are shown as individual sample items in this guide all items on the AzMERIT CBT and PBT will be associated with one or more passages. The AzMERIT ELA test will have a Writing part, Reading Part 1 and Reading Part 2 for all grade levels. On paper the students will have access to one or more passages that relate to the prompt, a print copy of the Writing Guide and a "Final Copy" area to write their response. Below are examples that show how many of the CBT items will render on the PBT.

### *Multiple-Choice*

Read the sentence below.

     Julie <u>noticed</u> a brown bag sitting on the table.

What is the meaning of the word <u>noticed</u> as it is used in the sentence?

  Ⓐ  placed

  Ⓑ  saw

  Ⓒ  took

  Ⓓ  used

*Key:* B

## *Multi-Select*

Which **two** words mean the same as <u>huge</u>?

Ⓐ  big

Ⓑ  cozy

Ⓒ  extra

Ⓓ  large

Ⓔ  tiny

**Key:** A, D

*Sample Stimulus*

# Online Learning

1      Learning new things is an exciting part of life. Learning can happen anywhere. There are kids who learn at a school, kids who learn at home and some kids who learn online. Students who learn this way use their computers and the Internet to connect to online classrooms. They use a camera connected to their home computer to let the teacher and other students see them. They can see their teacher and classmates on their screens because their classmates and teacher use a camera, too.

2      Before the Internet, children in remote places sometimes had classes over the radio or used the mail to get lessons and return them. For example, in the past, children who lived in distant parts of Australia were taught using the radio. Every day at a certain time, they tuned in to a special radio station. All the children could hear their teacher at the same time, but they were hundreds of miles apart. They got their lessons in the mail, did their homework, and mailed it back to the teacher.

3      Today, students who live far away from their teacher have classes on the Internet. In some online classrooms, a classroom full of kids can use a special computer program at the same time as the teacher. The students can live in one country, and the teacher can be located in a different country. Still, it's just like a classroom at your school. The teacher can teach the kids. The kids can ask questions. Everyone can see and hear everything that's being said as it happens.

4      It is also possible for students to live in different places and be a part of an online class together. Each person goes to a website for the class they are taking. Thousands of people can watch and listen to this class at the same time. When they want to speak, they can use a microphone to ask and answer questions. When the lesson is completed and all good-byes have been said, the students and teacher in the online class log out. The connection over the Internet is broken, and the online classroom disappears.

5      Online classes can be held whenever is best for the teacher and students. Sometimes, they don't have to have a class where everyone is together all at once. There are classes where all the materials are posted on the website and students can use them whenever they need to. They can write questions and turn in their assignments. They can check back later to see if the teacher has left answers or comments on their work. No one ever actually "meets" anyone face-to-face, even if it's just with a web-camera. Many college classes are taught this way.

6      Internet classes can fit thousands of people, or just one person. It is a powerful way to let students everywhere learn. A student in Alaska and a student in China can go to the same class. That class can be taught by a teacher in Russia. You don't need a building, desks, lights or enough chairs to fit everyone. Students who live far apart, students who can't leave home, students who want to take a class they can't take nearby—all they need is a computer and an Internet connection and they're good to go!

## *Evidence-Based Selected Response*

### *Part A*

How has learning from distant places changed over time?

Ⓐ   Students can ask questions and get answers faster.

Ⓑ   Students can hear their teacher during the same class time.

Ⓒ   Students use the mail to receive and send work.

Ⓓ   Students live far apart from their classmates.

### *Part B*

Select **one** sentence that supports the answer in part A.

Ⓐ   "The students can live in one country, and the teacher can be located in a different country."

Ⓑ   "All the children could hear their teacher at the same time, but they were hundreds of miles apart."

Ⓒ   "They got their lessons in the mail, did their homework, and mailed it back to the teacher."

Ⓓ   "Everyone can see and hear everything that's being said as it happens."

Ⓔ   "Sometimes, they don't have to have a class where everyone is together all at once."

*Key:*
Part A: A
Part B: D

## *Two-Part Hot Text*

***Part A***

How does the author support the idea that students who live far from each other can learn together?

ⓐ She tells about why students should learn online.

ⓑ She shares details about the way students learn online.

ⓒ She gives examples of how online learning helps students.

ⓓ She explains that the online classroom is only for a short time.

***Part B***

Fill in the circle before the **two** sentences that support the answer in part A.

4    ⓐ It is also possible for students to live in different places and be a part of an online class together. ⓑ Each person goes to a website for the class they are taking. ⓒ Thousands of people can watch and listen to this class at the same time. ⓓ When they want to speak, they can use a microphone to ask and answer questions. ⓔ When the lesson is completed and all good-byes have been said, the students and teacher in the online class log out. ⓕ The connection over the Internet is broken, and the online classroom disappears.

***Key:***
Part A: B
Part B: C, D

## One-Part Hot Text

Select **one** sentence that explains how jump rope rhymes have spread.

Ⓐ Jumping rope is a fun game. Ⓑ To play, two people hold the ends of a rope and turn it. Ⓒ Others take turns jumping. Ⓓ Often, the turners call out rhymes for the jumpers. Ⓔ Some rhymes give the jumper directions. Ⓕ Some count how many times the jumper can jump before missing. Ⓖ Many rhymes have lasted a long time and spread to new places. Ⓗ Friends can teach each other rhymes, and children might learn them from their parents.

**Key:** H

## Editing Task Stimulus

# Koalas

**Directions:** Read the following passage and answer Numbers 1 through 3. There are five underlined words or phrases in the passage to show which word or phrase may be incorrect.

Koalas are animals that live in Australia. They <u>looked</u> a little bit like small bears, <u>but</u> they are not bears. They are brown or gray, with round, fluffy ears, and they have no tails. You have probably seen pictures of koalas. They are very popular because they are so cute.

Koalas are herbivores, which means they eat plants. They live in trees and love to climb. Koalas are <u>knowne</u> to sleep up to 20 <u>ours</u> a day.

Many people around the world visit zoos to see koalas. They can live 13 to 18 years in the wild, but the <u>older</u> zoo koala on record lived to be 23 years old.

## *Editing Task Questions*

**Directions:** Now answer Numbers 1 through 3. Choose the correct word or phrase for each of the following.

**1**  **Part A**

They <u>looked</u> a little bit like small bears, but they are not bears.

Ⓐ look

Ⓑ will look

Ⓒ looks

Ⓓ Correct as is

**Part B**

They looked a little bit like small bears, <u>but</u> they are not bears.

Ⓐ or

Ⓑ nor

Ⓒ because

Ⓓ Correct as is

*Key:*
Part A: A
Part B: D

**2**  **Part A**

Koalas are <u>knowne</u> to sleep up to 20 ours a day.

Ⓐ knowen

Ⓑ known

Ⓒ none

Ⓓ Correct as is

**Part B**

Koalas are knowne to sleep up to 20 <u>ours</u> a day.

Ⓐ owers

Ⓑ howers

Ⓒ hours

Ⓓ Correct as is

*Key:*
Part A: B
Part B: C

**3**  They can live 13 to 18 years in the wild, but the <u>older</u> zoo koala on record lived to be 23 years old.

Ⓐ old

Ⓑ most old

Ⓒ oldest

Ⓓ Correct as is

*Key:* C

## *Writing Test Final Copy Pages (Grades 3–4)*

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**Writing**

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**Writing**                                    **Page 11**

## Writing Test Final Copy Pages (Grades 5–11)

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**Writing**                                    **Page 11**

## Sample Paper Items—Math

The AzMERIT Math test will have a Math Part 1 and a Math Part 2. On the CBT and the PBT some math items are open-ended and hand scored. The following samples will familiarize students with how items appear on the paper version of AzMERIT.

### *Multiple Choice*

A model is shown.

$$\begin{matrix} \bullet & \bullet & \bullet & \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet & \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet & \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet & \bullet & \bullet & \bullet \end{matrix}$$

Which expression does this model represent?

Ⓐ  4 + 6

Ⓑ  4 − 6

Ⓒ  4 × 6

Ⓓ  4 ÷ 6

**Key:** C

### *Equation Item*

A classroom has 5 rows of desks. There are 6 desks in each row.

Create a multiplication equation that shows the number of desks in the classroom.

Write your equation in the box below.

**Key:** 5 × 6 = 30 or 6 × 5 = 30 are accepted.

*Note*: Equation may be reversed.

## *Equation Item*

A fraction is shown.

$$\frac{1}{4}$$

Create an equivalent fraction with a denominator of 8.



*Notes regarding equation item response grids:*

The item's response grid looks slightly different at different grade levels, but the general response  area looks like the following image.

On these items, blanks are generally ignored. This means that students can   left or right justify their response, or place it somewhere in the middle. Note: The purpose of the boxes above the grid are an aid to bubbling but are not scored.

These responses to the question shown above will all be scored as equivalent.



Mixed Numbers and Decimals: There are several options that will all be scored equivalent.

Example: where a correct response would be 1 ½, all of the following would be scored as correct.



Note that in the first example (that of the mixed number) the space between the ones is important. Without this space the response would be scored as eleven-halves. Again, in any of these three shown responses, which column the student chooses to begin their response in does not matter.

## Table Item

Complete the table to show each of the given numbers rounded to the nearest ten and the nearest hundred.

| Number | Nearest Ten | Nearest Hundred |
|--------|-------------|-----------------|
| 62 | | |
| 115 | | |

**Key:**

| Number | Nearest Ten | Nearest Hundred |
|--------|-------------|-----------------|
| 62 | 60 | 100 |
| 115 | 120 | 100 |

## Open Response Item

A rectangle can be covered by 15 unit squares.

What can be said about the area of the rectangle?

Write your equation in the box below.

**Key:** The student correctly explained the relationship between the "15 unit squares" and the area of the rectangle (and did not include any incorrect statements).

*Note:* Any response that states that the area of the rectangle is 15 unit squares is accepted.
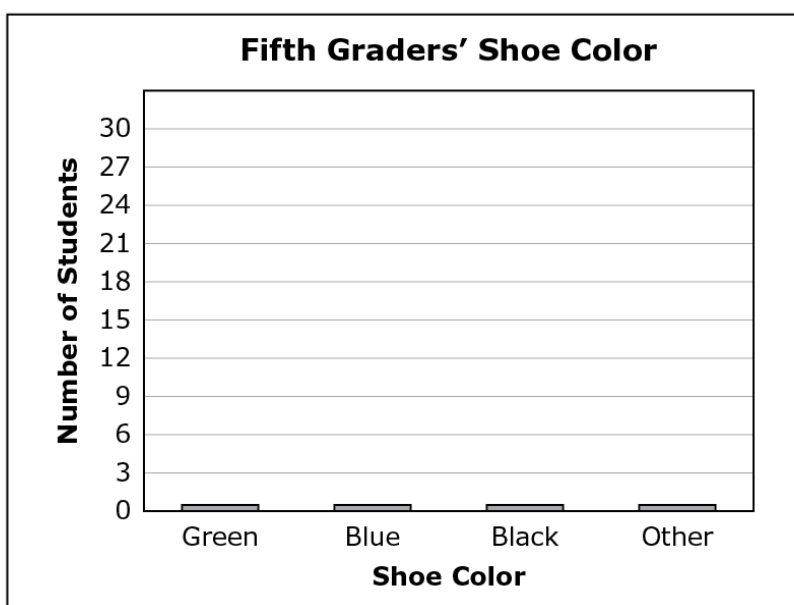
## Grid Item

The table shows the shoe color of fifth graders at an elementary school.
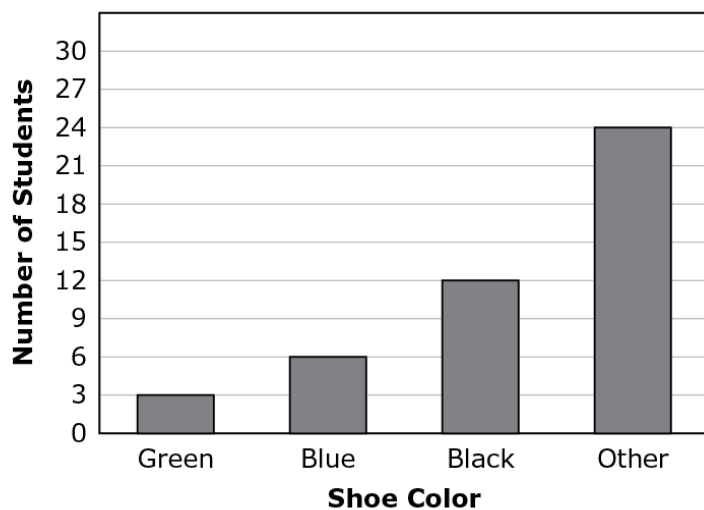
### Shoe Color of Fifth Graders

| Shoe Color | Number of Students |
|------------|--------------------|
| Green | 3 |
| Blue | 6 |
| Black | 12 |
| Other | 24 |

Complete the bar graph to display the data from the table.

**Fifth Graders' Shoe Color**



*Key:*

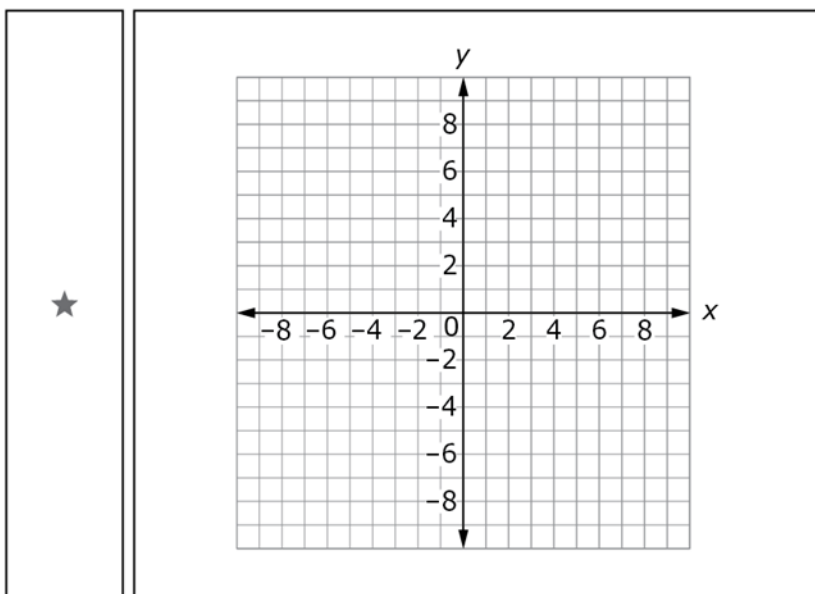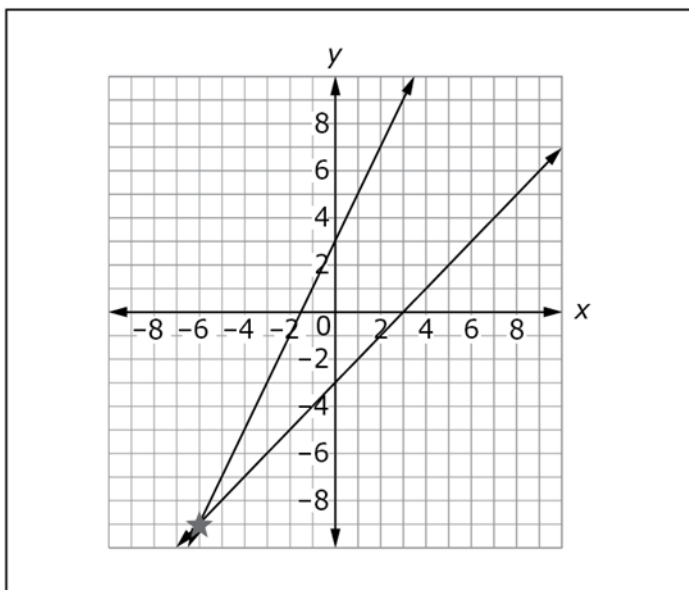## *Grid Item*

A system of equations is shown.

$$y = 2x + 3$$
$$x - y = 3$$

Draw lines to graph the system.

Then draw a star to indicate the solution of the system.



**Key:**

## *Hot Text Item*

The names of five shapes are shown.

Write a letter of a number in each empty box to order the shapes from least number of angles to greatest number of angles.

| Shapes |
| --- |
| A. Hexagon |
| B. Octagon |
| C. Pentagon |
| D. Rhombus |
| E. Triangle |

**Least**

↓

**Greatest**

| Ordered Shapes |
| --- |
|  |
|  |
|  |
|  |

**Key:**

| Shapes |
| --- |
| A. Hexagon |
| B. Octagon |
| C. Pentagon |
| D. Rhombus |
| E. Triangle |

**Least**

↓

**Greatest**

| Ordered Shapes |
| --- |
| E |
| D |
| C |
| A |
| B |

## Matching Item

Select the product for each expression.

|       | 12  | 16  | 18  |
|-------|-----|-----|-----|
| **4 × 4** | Ⓐ | Ⓑ | Ⓒ |
| **6 × 2** | Ⓓ | Ⓔ | Ⓕ |
| **4 × 3** | Ⓖ | Ⓗ | Ⓘ |
| **6 × 3** | Ⓙ | Ⓚ | Ⓛ |
| **8 × 2** | Ⓜ | Ⓝ | Ⓞ |

**Key:**

|       | 12  | 16  | 18  |
|-------|-----|-----|-----|
| **4 × 4** | Ⓐ | **Ⓑ** | Ⓒ |
| **6 × 2** | **Ⓓ** | Ⓔ | Ⓕ |
| **4 × 3** | **Ⓖ** | Ⓗ | Ⓘ |
| **6 × 3** | Ⓙ | Ⓚ | **Ⓛ** |
| **8 × 2** | Ⓜ | **Ⓝ** | Ⓞ |