

# Ohio's State Tests Released Items Scoring Guidance in Mathematics

This document provides additional information and clarification on scoring the various item types on the Ohio's State Tests in mathematics.

## CONTENT CLARIFICATIONS

$\pi$ , 3.14, and  $\frac{22}{7}$

The test scoring rubrics allow students to use any of the three different values for Pi ( $\pi$ , 3.14, and  $\frac{22}{7}$ ).

### Definition of a Trapezoid

Both definitions of a trapezoid are permissible. It is a local decision which to use for instruction.

### Rounding Strategies

The Ohio Learning Standards do not require students to use a specific rounding strategy in grades 3-5. Test items that assess rounding allow for students to use a variety of strategies when rounding a half. These strategies may include, but are not limited to, using the following: round half up, round half down, round half to even, round half to odd, and rounding half away from zero.

### Rounding to a specified place value

Test items in grades 3-5 that assess rounding to a specific place value must be rounded to the specified place value for credit.

Test items at higher grade levels (i.e. grade 6 and above) may instruct students to round their answers. This instruction (e.g., round your answer to the nearest tenth) is necessary because many calculations result in irrational numbers. The rounding instruction for these items provides a standard 'stopping place' for students' answers.

Since standards at higher grade levels assess content other than rounding, a range of values will be accepted as correct. Answers that are more precise than the rounding instructions will be accepted. Answers that are truncated can be less precise than the rounding instructions and therefore may fall outside the range of acceptable values.

### Significant Figures

Significant figures are not in the mathematics standards. Significant figures may be included in some high school science courses. As a result, students are not denied credit for entering responses to test items with leading and/or trailing zeros (i.e. 004 or 0.400).

## GENERAL SCORING INFORMATION

### There May Be More Than One Way to Show a Correct Answer

Some items contain more than one representation of a correct answer. Students only need to identify one correct representation. Entering multiple representations may impact the scoring of the item.

## ITEM TYPE SCORING

### Extended Response and Short Answer Items

These item types are hand-scored. They can be either 1-point or multiple points. Single point items do not allow students to earn partial credit. Multiple point items allow students to earn full, partial or no credit based on their response.

## EQUATION ITEMS

### Equivalent Fractions

Ohio's Learning Standards do not require that students place fractions in the lowest terms. Equation items allow students to enter any fraction equivalent to the preferred answer to earn credit.

### Any Equivalent Value

Many test items do not require students to enter a number in a specific form like a fraction or decimal. Students can earn credit for any equivalent value to the exemplar (i.e., 4, 4.0, and  $\frac{4}{1}$ ).

### Expressions vs. Equations

Mathematical expressions express calculations with numbers. Expressions may contain variables, operations and/or numbers. An *equation* is a statement that two expressions are equal.

Some test items in grades 3-5 ask for the student to enter an expression for their response. Students will earn full credit for a correct expression or equation. To receive credit for an equation, both expressions must be equivalent.

As students in grades 6-8 receive further instruction on equations and expressions with the Expressions and Equations domain, more precise usage is required for credit.

## GRID, HOT TEXT, MATCHING AND TABLE ITEMS

These item types can be either 1-point or multiple points. Single point items do not allow students to earn partial credit. Multi-point items allow students to earn full, partial or no credit based on their responses.

## MULTI-SELECT ITEMS

Multiple select items are 1-point items only and do not allow for partial credit. Students must select all of the correct answer choices for credit.

### **Select the two or Select the three**

All multi-select items in grades 3-5 will use the language, *Select the **two*** or *Select the **three***. For these items, students can only select two or three of the answer choices. Students taking the test online will not be allowed to enter more responses than are required for credit. If a student already has selected two or three answers and wants to select a different answer choice, they will have to unselect one or more of their responses before selecting a new answer choice.

In grade 6-8, students will transition from the language of *Select the **two*** and *Select the **three*** to *Select **all***. Students in grade 6-8 may see both versions appear on the same test. When prompted to *Select the **two*** or *Select the **three***, students will not be allowed to enter more responses than are required for credit. If a student selects one or more correct answer choices and an additional selection that is incorrect, the student will not receive credit for his or her response.

### **Select all**

All multiple-select items on the end-of-course exams will use the language *Select **all***. For multiple select items containing the words *Select **all***, more than one correct answer or equivalent value is given in the list of answer choices. Students can select as many answer choices as they think are correct for the item. If a student selects all of the correct answer choices and includes an additional selection that is not correct, the student will not receive credit for his or her response.

### **Multiple Choice Items**

This item type is 1-point only. Single point items do not allow students to earn partial credit.