

## ILEARN Mathematics FAQs

### What are test blueprints?

The test blueprints for each grade identify the four reporting categories (plus process standards) and the frequency/priority of standards. Standards with a minimum occurrence of '1' are guaranteed to be on each student's test at least once and may be inferred to be critical (replacing check plus guidance). Others with a minimum of '0' can be differentiated based on the maximum number of times they may occur. The computer adaptive model will select items based on student performance and difficulty statistics but will always maintain the distribution parameters of the blueprint.

ILEARN Blueprints:

<https://www.doe.in.gov/assessment/ilearn-test-design>

### What are item specifications?

Item specifications are documents containing the features of how an individual item will be constructed. They contain the standard, vocabulary, item types, cognitive complexity, and evidence statements. Content limits give specific rules (including formulas and conversions) about how the items must be written. A sample problem can demonstrate one way it may appear in the test. Accessibility considerations will note the potential use of a calculator in grades 6-8. The specifications come in three similar formats (Indiana, Independent College-and-Career Readiness, or Smarter Balanced) based on the items that align to our standards as items are licensed from third party banks by the state of Indiana. The items will never exceed the content of the Indiana Academic Standards. These may be viewed by standards or downloaded as a zip file.

Item Specifications Database:

<http://iasstandardviewer-878159656.us-east-2.elb.amazonaws.com/>

### What is the Practice Cluster notation in the item specifications?

The Practice Cluster notation does not apply to Indiana content standards. They come listed as an attribute of the licensed ICCR specifications and cannot be modified. These are similar to mathematical processes in Indiana, but unlike other states, we will not

have an item that is measuring a content standard be dual aligned to a process standard. They may be disregarded when looking at the item for content parameters.

## **What do the different calculator designations mean in the item specifications?**

The calculator designation determines the segment of the test in which an item may appear. The calculator 'allowed' or 'allowable' designation places items assessing a particular standard in the calculator segment. A calculator 'no' or 'none' label will place the item in a non-calculator segment. A 'neutral' designation means the calculator usage is irrelevant and the item could be pulled in to either segment by the adaptive algorithm to conform to the blueprint.

## **What are the changes to the Calculator Policy?**

The Indiana Department of Education (IDOE) revisited the use of the calculator in Grades 3-5 as an accommodation to ensure reporting reflects the construct being assessed. After receiving feedback from educators regarding accessibility, IDOE will no longer allow calculators as an accommodation in Grades 3-5 as most of these foundational mathematical skills include computation.

Link to the IDOE Calculator Policy:

<https://www.doe.in.gov/sites/default/files/assessment/calculator-policy-update-101918.pdf>

Links to Hundreds Chart, Multiplication Table, and Sample Graph Paper:

<https://www.doe.in.gov/sites/default/files/assessment/idoe-hundreds-chart.pdf>

<https://www.doe.in.gov/sites/default/files/assessment/idoe-multiplication-table.pdf>

<https://www.doe.in.gov/sites/default/files/assessment/idoe-sample-graph-paper.pdf>

## **What is a Desmos Online Calculator?**

The vendor for the online calculator is Desmos. The same version of the calculator that will appear in the test is available for practice in the Released Items Repository (RIR). Additionally there are free classroom activities located on their website. Grade 6 will use the four function calculator, and grades 7-8 will have the scientific calculator. An

equivalent handheld calculator may only be used by a student testing on paper or with an accommodation. The handheld calculator may only be used during the calculator allowable segment.

<https://www.desmos.com/>

## **Will students have access to formula reference sheets?**

There will no longer be reference sheets available as a hard copy or an online tool/icon. Any required formulas or inter-system conversions that are not written into the Indiana Academic Standards will be provided within the item stem itself.

For example, grade 5 students must know the formula for volume of a right rectangle prism (5.M.5), but the area formula of a triangle (5.M.3) will always be provided to the student in the relevant question.

The provided formulas and conversions can be found here:

<https://www.doe.in.gov/sites/default/files/assessment/ilearn-formula-reference.pdf>

## **What is the Released Items Repository (RIR)?**

Practice problems representing a variety of item types can be found in the RIR for each grade. The discrete items are separate from the performance tasks. Select a grade and a content area, and experiment with various supports as well. Please note, the calculator will always appear in this sample mode, regardless of the standard being assessed. The aligned standards and an answer key can be found in the RIR Scoring Guides.

Access to Released Items Repository and the Scoring Guides:

<https://www.doe.in.gov/assessment/ilearn-sample-items-and-scoring>

## **What is a Mathematics Performance Task (PT)?**

The ILEARN Mathematics Performance Tasks replace the previous part one constructed response items. Each student will only have one PT. A common stimulus will be used to answer approximately five questions about an authentic real-world

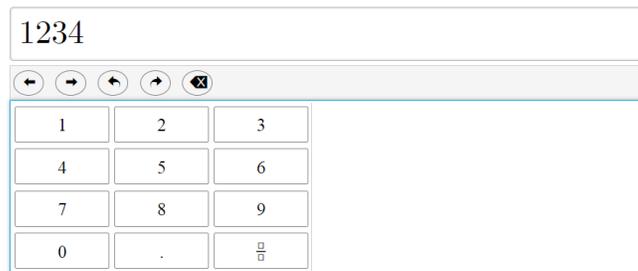
scenario. Each item will assess for a content standard, or a process standard, but not both as in the past.

Click on the video link to see a demo of the PT layout and item scoring:

<https://youtu.be/hhn0U8H-GVM>

## How does a Numeric Response item type function?

Commas are not permitted to be entered into the numeric response boxes for the discrete items. Even an item inquiring about standard form will be written as digits only. For example, one thousand two hundred thirty-four would not be written as 1,234 but rather as:



The image shows a numeric response input field. The top part is a text box containing the number "1234". Below the text box is a toolbar with navigation arrows and a clear button. Below the toolbar is a numeric keypad with buttons for digits 1-9, 0, a decimal point, and a fraction button.

Only the numbers, decimal, and forward slash on the keyboard are enabled on a keyboard for input. The space bar is not enabled. Mixed numbers are permitted by typing a whole number then clicking the fraction button. However, using the slash will raise anything prior to the spot of a numerator.

If a student intends to write  $5 \frac{2}{3}$  as a mixed number, the correct key sequence is: '5', 'fraction button' (automatically jumps to numerator), '2', click on denominator box, '3'



The image shows a numeric response input field. The top part is a text box containing the mixed number  $5 \frac{2}{3}$ . Below the text box is a toolbar with navigation arrows and a clear button. Below the toolbar is a numeric keypad with buttons for digits 1-9, 0, a decimal point, and a fraction button.

Typing '5', '2', '/', '3' will result in an incorrect response:

52		
3		
← → ↶ ↷ ✕		
1	2	3
4	5	6
7	8	9
0	.	$\frac{\square}{\square}$

Unless otherwise noted in an item, all forms of an equivalent response will be scored correctly, including non-reduced fractions, improper fractions, decimals, and leading or trailing zeros.

## How does a Gridded Response item function?

This item type in the paper-and-pencil mode is equivalent to the online numeric response. It requires a student to write one digit or symbol in a box and then bubble the corresponding circle in the column underneath. Only the symbols shown (decimal, fraction bar, or negative sign) may be recorded. New in ILEARN, students may enter mixed numbers as whole number digit(s), empty space, numerator digit(s), fraction bar, and denominator digit(s).