



# Released Items

# Grade 4 Math

## AzMERIT

Updated January, 2019

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



## About the Released Items

The *AzMERIT Released Items* provides details about the items, student response types, correct responses, and related scoring considerations for released AzMERIT test items.

Within this guide, each item is presented with the following information:

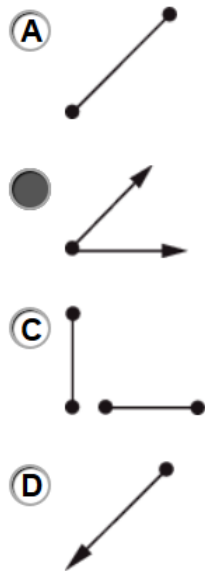
- Cluster
- Content Standard
- Depth of Knowledge (DOK)
- Static presentation of the item
- Static presentation of student response field (when appropriate)
- Answer key, rubric or exemplar
- Applicable score point(s) for each item
- Option rationales (when applicable)

The items included in this guide are representative of the kinds of items that students can expect to experience when taking the computer-based test for AzMERIT Grade 4 Math.

## Grade 4 Math Released Items

Cluster	Content Standard	DOK
4.MD.C	4.MD.C.5	1

Which figure shows an angle greater than  $0^\circ$ ?



**(1 Point)** Student selected the correct option.

### Option Rationales:

**Choice A:** The student may have identified the line segment as an angle, recalling that an angle has an endpoint.

**Choice B: Key** - The student correctly identified an angle.

**Choice C:** The student may have thought that since these appear to be a right angle, it is greater than 0 degrees, but in fact these are not two rays and are not joined at the same vertex and therefore do not have a measure.

**Choice D:** The student correctly identified a ray as an angle but neglected the fact that it is not greater than 0 degrees.

Cluster	Content Standard	DOK
4.OA.A	4.OA.A.3	3

Luke has 200 packages of popcorn, 250 packages of raisins, and 300 packages of pretzels. He delivers all the packages to 6 stores. He delivers the same number of packages to each store.

How many packages of snacks will Luke deliver to each store?

125

←
→
↶
↷
✖

1	2	3
4	5	6
7	8	9
0	.	$\frac{\square}{\square}$

**(1 Point)** Student entered **125** or any equivalent value.

Cluster	Content Standard	DOK
4.NBT.A	4.NBT.A.1	1

In which number is the value of the 6 ten times the value of the 6 in 34,619?

- 6,320
- B 7,864
- C 34,629
- D 360,519

**(1 Point)** Student selected the correct option.

**Option Rationales:**

**Choice A: Key** - The student correctly determined the number that holds a digit with a place value ten times the place value of the digit in the stem.

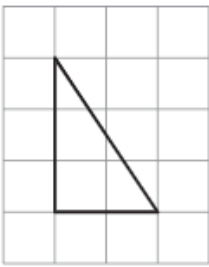
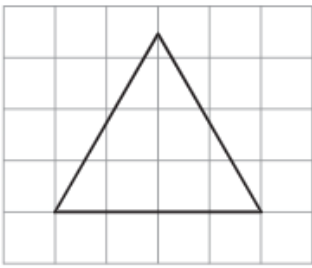
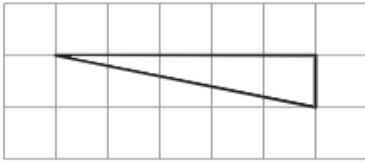
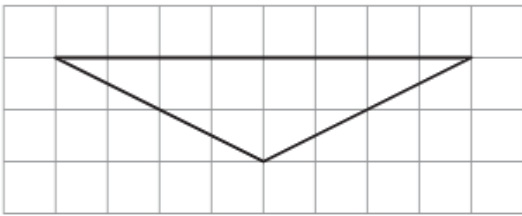
**Choice B:** The student may have thought the place digit to the right was 10 times larger than the digit to its left.

**Choice C:** The student may have read the words “ten times” and added 10 to the given value.

**Choice D:** The student may have to select the largest number that is the closest to 10 times the value of the whole number.

Cluster	Content Standard	DOK
4.G.A	4.G.A.2	1

Classify the four triangles.

	Acute	Right	Obtuse
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**(1 Point)** Student correctly identified each triangle type.

Cluster	Content Standard	DOK
4.NF.C	4.NF.C.7	2

Kate compares the decimals given.

$$0.57 > 0.6$$

Which statement is true?

- A** Kate is correct because 57 is greater than 6.
- B** Kate is correct because 0.57 has two numbers after the decimal and 0.6 has one.
- C** Kate is not correct because the 5 in the tenths place is less than the 6 in the tenths place.
- D** Kate is not correct because the 7 in the hundredths place is less than the 6 in the tenths place.

**(1 Point)** Student selected the correct option.

**Option Rationales:**

**Choice A:** The student may have thought the decimal place makes no difference when comparing numbers.

**Choice B:** The student may have thought that the more digits the greater the number.

**Choice C: Key** - The student understands that to compare these numbers, one must first look at the digits in the tenths place.

**Choice D:** The student may have recognized that the statement was incorrect but did not use the correct place value comparison to justify their reasoning.