

## Nevada Alternate Assessment

# Nevada Academic Content Standard Connectors for Mathematics 

## Grade 6

Contents
Nevada Academic Content Connectors ..... 2
Example: Mathematics Grade 3 ..... 2
NAA Mathematics NVAC Connectors - Grade 6 ..... 3
Understand ratio concepts and use ratio reasoning to solve problems .....  3
Compute fluently with multi-digit numbers and find common factors and multiples. ..... 3
Apply and extend previous understandings to the system of rational numbers. .....  3
Apply and extend previous understandings of arithmetic to algebraic expressions. .....  3
Reason about and solve one-variable equations and inequalities ..... 4
Summarize and describe distributions. ..... 4
Solve problems involving area, surface area, and volume. ..... 4

## Nevada Academic Content Connectors

The Nevada Academic Content Connectors (NACC) for Math represent the academic skills upon which students to be instructed. The NACCs for Math are linked to the Nevada Academic Content Standards and represent the key academic knowledge, skills and abilities of the Math content at each grade level. The Nevada Alternate Assessment for mathematics will report to the Smarter Balanced Claims for Mathematics.

## Example: Mathematics Grade 3

| Nevada Academic Content Standards <br> (NV ACS) | NVAC Connectors |
| :--- | :--- |
| Use place value understanding and properties <br> of operations to perform multi-digit <br> arithmetic. 0 |  |
| 3.NBT.A.1 Use place value understanding to round <br> whole numbers to the nearest 10 or 100. (2) | Use place value to round whole numbers to the <br> nearest 10. (3) |
| 3.NBT.A.2 Fluently add and subtract within 1,000 using <br> strategies and algorithms based on place value, <br> properties of operations, and/or the relationship between <br> addition and subtraction. (2) | -Fluently add and subtract within 1,000 with <br> non-regrouping numbers. (3) |

(1) Mathematics Cluster Heading
(2) Mathematics Content Standards
(3) Connectors to the content standards

The Nevada Alternate Assessment was developed to allow students an opportunity to fully demonstrate their knowledge in each content area. This ability to demonstrate knowledge of core content and skills is critical as educators seek to provide access to the general education curriculum while fostering higher expectations for students with significant cognitive disabilities.

## NAA Mathematics NVAC Connectors - Grade 6

| Nevada Academic Content Standards (NVACS) | NVAC Connectors |
| :---: | :---: |
| Understand ratio concepts and use ratio reasoning to solve problems. |  |
| 6.RP.A. 1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. | Identify or describe simple ratio relationships between two quantities. <br> Describe ratio relationships between two quantities for a given situation. |
| Compute fluently with multi-digit numbers and find common factors and multiples. |  |
| 6.NS.B. 3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. | Fluently add, subtract, and multiply decimal numbers. |
| 6.NS.B. 4 Find the greatest common factor of two whole numbers less than or equal to 12 . Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. | Identify common multiples or factors between two numbers. |
| 6.NS.C. 6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. <br> 6.NS.C.6.a Recognize the opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of anumber is the number itself, e.g. $-(-3)=3$ and that 0 is its own opposite. | Represent positive integers and negative integers on a number line. |
| Apply and extend previous understandings of numbers to the system of rational numbers. |  |
| 6.NS.C. 8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. | Determine the distance between two points on a coordinate plane. |
| Apply and extend previous understandings of arithmetic to algebraic expressions. |  |
| 6.EE.A. 2 Write, read, and evaluate expressions in which letters stand for numbers. <br> 6.EE.A.2.a Write expressions that record operations with numbers and with letters standing for numbers. | Represent a real-world situation using an algebraic expression. |
| 6.EE.A. 4 Identify when two expressions are equivalent (i.e. when the two expressions name the same number regardless of which value is substituted into them). | Identify when two expressions are equivalent. |


| Nevada Academic Content Standards <br> (NVACS) |  |
| :--- | :--- |
| Reason about and solve one-variable <br> equations and inequalities. |  |
| 6.EE.B.6 Use variables to represent numbers and <br> write expressions when solving a real-world or <br> mathematical problem; understand that a variable can <br> represent an unknown number, or, depending on the <br> purpose at hand, any number in a specified set. | Use a variable to represent numbers and write expressions <br> to solve real-world problems. |
| 6.EE.B.7 Solve real-world and mathematical <br> problems by writing and solving equations of the form <br> x+p $=q$ for cases in which p, qu, and x are all <br> nonnegative rational numbers. | Solve one-step real-world problems using equations in <br> which the quantities in the problem are all positive integers. |
| Summarize and describe distributions. |  |
| 6.SP.B.4 Display numerical data in plots on a number <br> line, including dot plots, histograms, and box plots. | Display data on a line plot, such as dot plots and <br> histograms. |
| 6.SP.B.5 Summarize numerical data sets in relation to <br> their context, such as by: | Summarize numerical data. |
| 6.SP.B.5.a Reporting the number of observations. |  |
| 6.SP.B.5.b Describing the nature of the attribute under <br> investigation, including how it was measured and its <br> units of measurement. |  |
| Solve real-world and mathematical problems |  |
| involving area, surface area, and volume. |  |$\quad$| 6.G.A.3 Draw polygons in the coordinate plane given <br> coordinates for the vertices; use coordinates to find <br> the ength of a side joining points iwht the same first <br> coordinate or the same second coordinate. Apply <br> these techniques in the context of solving real-world <br> and mathematical problems. |
| :--- | | Draw polygons on a coordinate plane relating to real-world |
| :--- |
| and mathematical problems. |

