

Nevada Alternate Assessment

Nevada Academic Content Standard
Connectors for Mathematics
Grade 6

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Nevada Academic Content Connectors

The Nevada Academic Content Connectors (NACC) for Math represents 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.

- **Claim #1- Concepts & Procedures**-“Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.”
- **Claim #2 – Problem Solving** “Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies.”
- **Claim #3 – Communicating Reasoning** “Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.”
- **Claim #4- Modeling and Data Analysis**- “Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.”

Example:

Nevada Academic Content Standards (NVACS)	NVAC Connectors
<p><i>Math Content Standard</i> 6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.</p>	<p>Identify simple ratio relationships between two quantities. <i>Connector to the content standard</i></p>
<p><i>Math Content Standard</i> 6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.</p>	<p>Fluently add, subtract, and multiply decimal numbers. <i>(Connector to the content standard)</i></p>

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

Understand ratio concepts and use ratio reasoning to solve problems.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
6.RP.A.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	Describe ratio relationships between two quantities for a given situations.

Compute fluently with multi-digit numbers and find common factors and multiples.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
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.

Apply and extend previous understandings of numbers to the system of rational numbers.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
<p>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.</p> <p>6.NS.C.6.a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.</p>	Represent positive integers and negative integers on a number line.

Apply and extend previous understanding of arithmetic to algebraic expressions.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
6.EE.A.2 Write, read, and evaluate expressions in which letters stand for numbers. 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.

Solve real-world and mathematical problems involving area, surface area, and volume.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
6.G.A.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	Draw polygons on a coordinate plane relating to real-world and mathematical problems.

Summarize and describe distributions.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
6.SP.B.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	Display data on dot plots.
6.SP.B.5 Summarize numerical data sets in relation to their context, such as by: 6.SP.B.5.a Reporting the number of observations. 6.SP.B.5.b Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.	Summarize numerical data.

Compute fluently with multi-digit numbers and find common factors and multiples.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple 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.

Apply and extend previous understandings of numbers to the system of rational numbers.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
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.

Reason about and solve one-variable equations and inequalities.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
6.EE.B.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	Use a variable to represent numbers and write expressions to solve real-world problems.
6.EE.B.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.	Solve one-step real world problems using equations in which the quantities in the problem are all positive integers.

Solve real-world and mathematical problems involving area, surface area, and volume.

**Nevada Academic
Content Standards
(NVACS)**

NVAC Connectors

6.G.A.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

Find the surface area of a three-dimensional figure by using two-dimensional nets.