

## Nevada Alternate Assessment

# Nevada Academic Content Standard Connectors for Mathematics 

## Grade 7

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## 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 7

| Nevada Academic Content Standards <br> (NVACS) |  |
| :--- | :--- |
| Analyze proportional relationships and use <br> them to solve real-world and <br> mathematical problems. |  |
| 7.RP.A.3 Use proportional relationships to solve <br> multi-step ratio and percent problems. Examples: <br> simple interest, tax, markups and markdowns, <br> gratuities and commissions, fees, percent increase and <br> decrease, percent error. | Solve one-step percent problems. |
| Apply and extend previous understandings of <br> operations with fractions. |  |
| 7.NS.A.1 Apply and extent previous understandings <br> of addition and subtraction to add and subtract <br> rational numbers; represent addition and subtraction <br> on a horizontal or vertical number line diagram. | Given a labeled horizontal number line diagram, represent <br> addition and subtraction of rational numbers. |
| 7dentify opposite quantities that combine to make zero. |  |
| 7.NS.A.1.a Describe situations in which opposite <br> quantities combine to make 0 . For example, a <br> hyudrogen atom has 0 charge because its two <br> constituents are oppositely charged. | Use a number line to show that a number and its opposite <br> have a sum of zero. |
| 7.NS.A.1.b Understand $p+q$ as the number located a <br> distance \|q| from $p$, in the positive or negative <br> direction depending on whether $q$ is positive or <br> negative. Show that a number and its opposite have a <br> sum of 0 (are additive inverses). Interpret sums of <br> rational numbers by describing real-world contexts. |  |
| 7.NS.A.3 Solve real-world and mathematical <br> problems involving the four operations with rational <br> numbers. | Solve real-world and mathematical problems with rational <br> numbers using models. |
| Solve real-life and mathematical problems |  |
| using numerical and algebraic |  |
| expressions and equations. |  |$\quad$| 7.EE.B.3 Solve multi-step real-life and mathematical <br> problems posed with positive and negative rational <br> numbers in any form (whole numbers, fractions, and <br> decimals), using tools strategically. Apply properties <br> of operations to calculate with numbers in any form; <br> convert between forms as appropriate; and assess the <br> reasonableness of answers using mental computation <br> and estimation strategies. | Solve one-step real-life and mathematical problems using <br> positive and negative numbers. |
| :--- | :--- |
| 7.EE.B.4 Use variables to represent quantities in a <br> real-world or mathematical problem, and construct <br> simple equations and inequalities to solve problems <br> by reasoning about the quantities. | Identify and solve simple equations and inequalities using <br> variables to represent quantities. |


| Nevada Academic Content Standards <br> (NVACS) |  |
| :--- | :--- |
| Draw construct, and describe geometrical <br> figures and describe the relationships <br> between them. |  |
| 7.G.A.1 Solve problems involving scale drawings of <br> geometric figures, including computing actual lengths <br> and areas from a scale drawing and reproducing a <br> scale drawing at a different scale. | Solve problems using scale drawings of rectangles. |
| 7.G.A.2 Draw (freehand, with ruler and protractor, <br> and with technology) geometric shapes with given <br> conditions Focus on constructing triangles from three <br> measures of angles or sides, noticing when the <br> conditions determine a unique triangle, more than one <br> triangle, or no triangle. | Identify types of triangles with given angle characteristics, <br> such as obtuse, acute, or right. |
| Use random sampling to draw inferences <br> about a population. |  |
| 7.SP.A.1 Understand that statistics can be used to gain <br> information about a population by examining a <br> sample of the population; generalizations about a <br> population from a sample are valid only if the sample <br> is representative of the population. Understand that <br> random sampling tends to produce representative <br> samples and support valid inferences. | Identify and/or make generalizations about a population <br> based on a sample. |
| Investigate chance proceses and develop, <br> use, and evaluate probability models. |  |
| 7.SP.C.6 Approximate the probability of a chance <br> event by collecting data on the chance process that <br> produces it and observing its long-run relative <br> frequency, and predict the approximate relative <br> frequency given the probability. | Determine the likelihood of a future event. |

