



**2011–2012  
Grade 7**

This three part document serves as a guide for the transition from the Nevada State Standards (NSS) to the Common Core State Standards (CCSS). Users of this document should also refer to the Grade 3 Introduction and Narrative, and the Glossary of the CCSS.

Part I: The tables below list the Common Core State Standards introduced into Grade 7 in school year 2011–2012. Corresponding Nevada State Standards are listed where the content matches in whole or in part. Teachers are expected to maintain the NSS as well as teach these CCSS. In many cases, the expectations of the CCSS exceed the NSS. Teachers must move their instruction, and therefore their students’ mathematical knowledge, from the level of the NSS to the CCSS. Teachers must also incorporate the *Standards for Mathematical Practice* into instruction to complete students’ educational experiences. Additional clarification is provided in the comments for some CCSS.

<b>Ratios and Proportional Relationships</b>			
<b>Analyze proportional relationships and use them to solve real-world and mathematical problems.</b>			
<b>Common Core State Standard (CCSS)</b>	<b>Nevada State Standard (NSS)</b>	<b>Change<sup>1</sup></b>	<b>Comments</b>
7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction <math>\frac{1/2}{1/4}</math> miles per hour, equivalently 2 miles per hour.</i>	3.8.5 Apply ratios and proportions to calculate rates and solve mathematical and practical problems using indirect measure.	-1	Extend work with ratios and proportions in the NSS to include complex fractions.
7.RP.2 Recognize and represent proportional relationships between quantities.  a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.	3.7.5 Write and apply proportions to solve mathematical and practical problems involving measurement and monetary conversions.	0	Extend writing and applying proportions in the NSS to include exploration of proportions in multiple ways.
7.RP.2 Recognize and represent proportional relationships between quantities.  b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.			

<sup>1</sup> Grade Level Change from current NSS to CCSS. (i.e., -1 indicates that the NSS was previously taught in the grade above.)



**Ratios and Proportional Relationships**

**Analyze proportional relationships and use them to solve real-world and mathematical problems.**

Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change <sup>1</sup>	Comments
7.RP.2 Recognize and represent proportional relationships between quantities.  c. Represent proportional relationships by equations. <i>For example, if total cost <math>t</math> is proportional to the number <math>n</math> of items purchased at a constant price <math>p</math>, the relationship between the total cost and the number of items can be expressed as <math>t = pn</math>.</i>	3.7.5 Write and apply proportions to solve mathematical and practical problems involving measurement and monetary conversions.	0	Extend work with measurement and monetary conversions in the NSS to include other applications.
7.RP.2 Recognize and represent proportional relationships between quantities.  d. Explain what a point $(x, y)$ on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where $r$ is the unit rate.			
7.RP.3 Use proportional relationships to solve multistep ratio and percent problems. <i>Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</i>	3.7.4 Calculate simple interest in monetary problems.	0	
	3.7.5 Write and apply proportions to solve mathematical and practical problems involving measurement and monetary conversions.	0	Extend writing and applying proportions in the NSS to percent error and other applications of multistep ratio and percent problems.
	3.8.4 Calculate percents in monetary problems.	-1	

**Geometry**

**Draw, construct, and describe geometrical figures and describe the relationships between them.**

Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change <sup>1</sup>	Comments
7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	4.6.2 Determine actual measurements represented on scale drawings.  Convert actual measurements to scale.	+1	
	4.7.2 Make scale drawings using ratios and proportions.	0	

<sup>1</sup> Grade Level Change from current NSS to CCSS. (i.e., -1 indicates that the NSS was previously taught in the grade above.)



<b>Geometry</b>			
<b>Draw, construct, and describe geometrical figures and describe the relationships between them.</b>			
<b>Common Core State Standard (CCSS)</b>	<b>Nevada State Standard (NSS)</b>	<b>Change<sup>1</sup></b>	<b>Comments</b>
7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	4.6.8 Construct circles, angles, and triangles based on given measurements using a variety of methods and tools including compass, straight edge, paper folding, and technology.	+1	
	4.8.8 Construct geometric figures using a variety of tools.	-1	
7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	4.7.4 Make a model of a three-dimensional figure from a two-dimensional drawing.  Make a two-dimensional drawing of a three-dimensional figure.	0	Extend work with figures in the NSS to include finding cross-sections of 3-D shapes by slicing.

Part II: The table below lists the Nevada State Standards (NSS) teachers are expected to continue to teach in Grade 7 in school year 2011–2012. In some cases, only part of the standard is to be maintained. These standards are still eligible to be assessed. Standards in **bold** indicate those found in Part I that link to the CCSS. Standards underlined indicate those that cannot be assessed on the state Criterion Reference Test (CRT). Additional clarification is provided in the comments.

<b>Nevada State Standard (NSS)</b>	<b>Comments</b>
<u>1.7.1</u> , 1.7.2, 1.7.3, 1.7.5, 1.7.6, 1.7.7, 1.7.8 2.7.1, 2.7.2, <u>2.7.3</u> , 2.7.4, 2.7.5 3.7.3, <b>3.7.4</b> , <b>3.7.5</b> 4.7.1, <b>4.7.2</b> , 4.7.3, <b>4.7.4</b> , 4.7.5, 4.7.6, <u>4.7.8</u> , <u>4.7.9</u> 5.7.1, 5.7.2, 5.7.4, 5.7.5, 5.7.6	Continue to teach the entire standard.

Part III: The table below lists the Nevada State Standards (NSS) teachers are no longer expected to teach in Grade 7 in school year 2011–2012. In some cases, only part of a standard is to be deleted. Additional clarification is provided in the comments.

<b>Nevada State Standard (NSS)</b>	<b>Comments</b>
3.7.1 Estimate and compare corresponding units of measure for area and volume/capacity between customary and metric systems.	While this NSS is being removed, such applications is implied by CCSS 6.RP.3d and 7.RP.3.
3.7.2 Given a measurement, identify the greatest possible error.	

<sup>1</sup> Grade Level Change from current NSS to CCSS. (i.e., -1 indicates that the NSS was previously taught in the grade above.)



Part III continued:

Nevada State Standard (NSS)	Comments
3.7.6 Use elapsed time to solve practical problems.	This standard is in the CCSS in Grades 4 and 5.
4.7.7 Model the Pythagorean Theorem and solve for the hypotenuse.	This standard is in the CCSS in Grade 8.
5.7.3 Analyze the effect a change of scale will have on statistical charts and graphs.	

<sup>1</sup> Grade Level Change from current NSS to CCSS. (i.e., -1 indicates that the NSS was previously taught in the grade above.)