

# Nebraska



## Nebraska Student-Centered Assessment System (NSCAS) Alternate Assessment

### Mathematics–Grade 7 Table of Specifications for Students with Significant Disabilities who take the Statewide Alternate Assessment

Mathematics Grade 7 Alternate Assessment Table of Specifications				
	DOK Stage 2	DOK Stage 3	DOK Stage 4	Item Total
<b>Number</b>				
<b>Operations: Students will compute with rational numbers accurately.</b>				
<b>7.N.2.a Add, subtract, multiply, and divide rational numbers (e.g., positive and negative fractions, decimals, and integers).</b>				
<b>7.N.2.a Add and subtract fractions and mixed numbers with like denominators up to 10 without regrouping.</b>	1-2	2-4	1-2	4-8
<b>Ratios and Proportions</b>				
<b>Proportional Relationships: Students will understand the concept of proportions, use language to describe the relationship between two quantities, and use proportions to solve authentic situations.</b>				
<b>7.R.1.a Decide whether two quantities are in a proportional relationship (e.g., by testing for equivalent ratios in a table).</b>				
<b>7.R.1.a Determine unit rate when given a table, limited to ratios of 1:2, 1:3, 1:5, and 1:10.</b>	0-1	0-2	0-1	0-2
<b>7.R.1.b Represent and solve authentic problems with proportions.</b>				
<b>7.R.1.b Given a proportional relationship that represents an authentic situation, determine the missing quantity.</b>	0-1	0-2	0-1	0-2
<b>7.R.1.c Use proportional relationships to solve authentic percent problems (e.g., percent change, sales tax, mark-up, discount, tip).</b>				
<b>7.R.1.c Identify the percentage for an authentic discount problem, limited to 10%, 25%, and 50%.</b>	0-1	0-2	0-1	0-2
<b>7.R.1.d Solve authentic problems involving scale drawings.</b>				
<b>7.R.1.d Given a scale drawing, identify the scale, limited to 1/4, 1/3, and 1/2.</b>	0-1	0-2	0-1	0-2
<b>Algebra</b>				
<b>Algebraic Processes: Students will apply the operational properties when evaluating expressions, and solving equations and inequalities.</b>				
<b>7.A.1.c Solve one- and two-step equations involving rational numbers.</b>				
<b>7.A.1.c Solve a one-step equation using multiplication.</b>	0-2	0-4	0-2	0-4
<b>7.A.1.d Solve equations using the distributive property and combining like terms.</b>				
<b>7.A.1.d Identify equivalent expressions using the distributive property, limited to digits 1–9 (e.g., <math>2(3 + 4) = (2 \times 6) + (2 \times 4)</math>).</b>	0-2	0-4	0-2	0-4
<b>7.A.1.e Solve one- and two-step inequalities involving integers and represents solutions on a number line.</b>				
<b>7.A.1.e Identify a solution to a one-step inequality involving addition, subtraction, or multiplication (e.g., <math>n + 1 &lt; 4</math>, <math>2n &gt; 8</math>).</b>	0-2	0-4	0-2	0-4
<b>Applications: Students will solve authentic problems with algebraic expressions, equations, and inequalities.</b>				
<b>7.A.2.a Write one- and two-step equations involving rational numbers from words, tables, and authentic situations.</b>				
<b>7.A.2.a Identify one-step addition, subtraction, and multiplication equations that represent authentic situations.</b>	0-2	0-4	0-2	0-4
<b>7.A.2.b Write one- and two-step inequalities to represent authentic situations involving integers.</b>				
<b>7.A.2.b Identify an inequality that represents a solution to a one-step problem involving addition, subtraction, or multiplication in an authentic situation.</b>	0-2	0-4	0-2	0-4

Geometry				
<b>Attributes: Students will identify angle relationships and apply properties to determine angle measures.</b>				
7.G.1.a Apply properties of adjacent, complementary, supplementary, linear pair, and vertical angles to find missing angle measures.				
7.G.1.a Identify a pair of angles as complementary (equal to 90°) or supplementary (equal to 180°).	0-2	0-3	0-2	0-3
<b>Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.</b>				
7.G.2.a Draw polygons in the coordinate plane given coordinates for the vertices.				
7.G.2.a Given a triangle in quadrant 1 with one vertex on the origin, identify the location of one of the other vertices.	0-2	0-3	0-2	0-3
<b>Measurement: Students will identify geometric attributes that create two- and three-dimensional shapes in order to perform measurements and apply formulas to find area and volume.</b>				
7.G.3.a Solve authentic problems involving perimeter and area of composite shapes made from triangles and quadrilaterals.				
7.G.3.a Solve authentic problems involving the perimeter and area of two adjoining rectangles by counting unit lengths and unit squares.	0-2	0-3	0-2	0-3
7.G.3.c Determine the area and circumference of circles both on and off the coordinate plane using 3.14 for the value of Pi.				
7.G.3.c Identify the center, radius, and diameter of a circle, and distinguish between the area of a circle and the circumference of a circle.	0-2	0-3	0-2	0-3
Data				
<b>Data Collection and Statistical Methods: Students will formulate statistical investigative questions, collect data, and organize data.</b>				
7.D.1.a Create an investigative question and collect data.				
7.D.1.a Collect data to answer an investigative question.	0-2	0-3	0-2	0-3
7.D.3.a Find theoretical and experimental probabilities for compound independent and dependent events.				
7.D.3.a Given an event that will sometimes happen, identify the degree of likelihood of an event as more likely, equally likely, or less likely.	0-2	0-3	0-2	0-3