

Nebraska State Accountability - Alternate Assessment of Mathematics (NeSA-AAM) Tables of Specification

Grade 11

NUMBER SENSE

Gr11 Computation	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.1.3 Students will compute fluently and accurately using appropriate strategies and tools.						
MA 12.1.3.a <u>General</u> Compute accurately with real numbers <u>Extended</u> <i>Add and subtract two-digit by two-digit numbers with regrouping</i>	4	0	0-1	0-2	0-2	1-3
MA 12.1.3.b <u>General</u> Simplify exponential expressions <u>Extended</u> <i>Recognize expanded forms of exponents (powers)</i>	3	0-1	0-2	0-3	0	1-3
Gr11 Estimation	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.						
MA 12.1.4.a <u>General</u> Use estimation methods to check the reasonableness of real number computations and decide if the problem calls for an approximation or an exact number <u>Extended</u> <i>Apply estimation to the nearest 10 on situations (story problems) involving addition, subtraction, and multiplication</i>	4	0	0	0-2	0-2	1-3
GEOMETRIC/MEASUREMENT CONCEPTS						
Gr11 Characteristics	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.2.1 Students will analyze characteristics, properties, and relationships among geometric shapes and objects.						
MA 12.2.1.d <u>General</u> Apply geometric properties to solve problems <u>Extended</u> <i>Apply the geometric property, length times width, to find the area of a rectangle</i>	4	0	0-1	0-2	0-2	1-3
MA 12.2.1.e <u>General</u> Identify and apply right triangle relationships <u>Extended</u> <i>Identify a right triangle</i>	3	0-1	0-1	0-3	0	1-3
Gr11 Coordinate Geometry	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals

MA 12.2.2 Students will use coordinate geometry to analyze and describe relationships in the coordinate plane.						
MA 12.2.2.a General Use coordinate geometry to analyze geometric situations Extended <i>Determine the coordinates for a point on a 7 x 7 or larger grid</i>	3	0	0-1	0-3	0	1-3
MA 12.2.2.d General Prove special types of triangles and quadrilaterals Extended <i>Identify the properties of equilateral triangles</i>	4	0-1	0-2	0-3	0-1	1-3
Gr11 Spatial Modeling	Highest Stage DOK Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.2.4 Students will use visualization, spatial reasoning, and geometric modeling to solve problems.						
MA 12.2.4.b General Use geometric models to visualize, describe, and solve problems Extended <i>Use geometric models to solve problems</i>	4	0	0-1	0-3	0-1	1-3
Gr11 Measurement	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.2.5 Students will apply the units, systems, and formulas to solve problems.						
MA 12.2.5.c General Convert between various units of area and volume, such as square feet to square yards Extended <i>Find the missing length and/or height in a right triangle</i>	4	0	0-1	0-2	0-2	1-3
MA 12.2.5.d General Convert equivalent rates Extended <i>Convert equivalent rates using money</i>	4	0	0-1	0-3	0-2	1-3
ALGEBRAIC CONCEPTS						
Gr11 Relationships	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.3.1 Students will generalize, represent, and analyze relationships using algebraic symbols.						
MA 12.3.1.a General Represent, interpret, and analyze functions with graphs, tables, and algebraic notation, and convert among these representations Extended <i>Interpret values of a function in a table</i>	4	0	0-1	0-2	0-2	1-3
MA 12.3.1.c General Identify the slope and intercepts of a linear relationship from an equation or graph Extended <i>Identify a linear relationship from a graph</i>	4	0	0-1	0-3	0-2	1-3
MA 12.3.1.d General Identify characteristics of linear and non-linear functions Extended <i>Compare linear and non-linear segments and graphs</i>	4	0-1	0-1	0-3	0-2	1-3

MA 12.3.1.f <u>General</u> Compare and analyze the rate of change by using ordered pairs, tables, graphs, and equations <u>Extended</u> <i>Analyze the effect of the rate of change in a table or graph</i>	4	0	0-1	0-3	0-2	1-3
Gr11 Modeling in Context	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.3.2 Students will model and analyze quantitative relationships.						
MA 12.3.2.b <u>General</u> Represent a variety of quantitative relationships using linear equations and one variable inequalities <u>Extended</u> <i>Solve the quantitative relationship of one variable inequalities using addition and subtraction</i>	4	0	0	0-3	0-3	1-3
DATA ANALYSIS/PROBABILITY CONCEPTS						
Gr11 Display and Analysis	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.4.1 Students will formulate a question and design a survey or an experiment in which data is collected and displayed in a variety of formats, then select and use appropriate statistical methods to analyze the data.						
MA 12.4.1.d <u>General</u> Describe the shape and determine the center, spread, and outliers of a data set <u>Extended</u> <i>Determine the range of a data set</i>	4	0	0	0-3	0-3	1-3
Gr11 Probability	Highest DOK Stage Tested	Stage 1	Stage 2	Stage 3	Stage 4	Item Totals
MA 12.4.3 Students will apply and interpret concepts of probability.						
MA 12.4.3.b <u>General</u> Identify dependent and independent events and calculate their probabilities <u>Extended</u> <i>Differentiate between a dependent and independent event</i>	4	0	0-1	0-3	0-3	1-3
MA 12.4.3.c <u>General</u> Use the appropriate counting techniques to determine the probability of an event <u>Extended</u> <i>Use the appropriate counting principle to determine the combinations for an event</i>	4	0	0-1	0-3	0-3	1-3
MA 12.4.3.d <u>General</u> Analyze events to determine if they are mutually exclusive <u>Extended</u> <i>Determine if two events are mutually exclusive</i>	4	0	0-1	0-3	0-3	1-3