

NSCAS–Alternate Achievement Level Descriptors High School Mathematics

Extended Indicator	Developing	On Track	Advanced
	<p>Developing learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student may need additional support for academic success at the next grade level.</p>	<p>On Track learners demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.</p>	<p>Advanced learners demonstrate high levels of proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.</p>
	Students at this level	Students at this level	Students at this level
MAE HS.N.1.a	Recognize the operation symbol that leads to a solution in a word problem when given the word minus/subtract, add, multiply, or divide.	Identify the operation that leads to a solution in a word problem when given a model of objects and/or support identifying the key word(s) (e.g., <i>each, per, altogether, total, more, sum, remain left over, less, difference</i>).	Identify an operation that leads to a solution in a word problem.
MAE HS.N.1.b	Recognize that the term <i>approximate</i> indicates an estimation (or close to a given amount) and that an exact value indicates one right answer.	Identify key words in context that indicate whether an exact value is necessary for solving a problem (e.g., <i>about, best guess, approximately, round, estimate, calculate, find the solution, sum, difference</i>).	Determine whether the context of a problem calls for an approximation or an exact value.
MAE HS.N.1.f	Use knowledge of equivalent rates to convert equivalent values with money up to \$0.25 (e.g., How many pennies equal 1 dime?).	Use knowledge of equivalent rates to convert equivalent values with money from \$0.26 to \$1.00 (e.g., How many dimes are there in \$1.00?).	Use knowledge of equivalent rates to convert equivalent values of more than \$1.00 (e.g., How many quarters are there in \$2.00?).
MAE HS.N.2.a	Recognize an exponential expression with a whole-number base and whole-number exponent as equivalent to a given repeated multiplication problem.	Identify an exponential expression with a whole-number base and whole-number exponent that is equivalent to a repeated multiplication problem, limited to exponents up to 5.	Rewrite a repeated multiplication problem as an exponential expression with a whole-number base and a whole-number exponent.
MAE HS.N.2.d	Add 2 two-digit numbers with regrouping, limited to digits 10–50.	Add 2 two-digit numbers with at least one addend greater than 50 with regrouping, and subtract 2 two-digit numbers with regrouping.	Add and subtract more than 2 two-digit numbers with regrouping.

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MAE HS.A.1.b	Given a linear function represented with a table and data points labeled with ordered pairs on a graph, recognize the graph of the linear function, limited to two or three data points.	Given a linear function represented with a table, identify the graph of the linear function, limited to two or three data points.	Given a linear function represented with a table, identify the graph of the linear function, limited to more than three data points.
MAE HS.A.1.c	Recognize a straight line on a graph as a linear function when given a model of the same linear function.	Identify a linear function from a graph when given a definition of a linear function and/or a model.	Identify a linear function from a graph.
MAE HS.A.1.d	Recognize the domain or range of a function when given a model with the headings "Domain" and "Range."	Identify the domain or range of a function when given an input-output table, the definition of domain or range, and/or a model.	Identify the domain and range of a function when given an input-output table.
MAE HS.A.1.e	Given a graph of a linear function and the coordinate pair for the point where $x = 0$, recognize the point where $x = 0$ (e.g., Which point has an x -value of 0?).	Given a graph of a linear function and the coordinate pairs for three points on the line, identify the point where $x = 0$ (e.g., Which point has an x -value of 0?).	Given a graph of a linear function with a point where $x = 0$, determine the coordinate pair where $x = 0$ (e.g., What is the coordinate pair for this point?).
MAE HS.A.2.a	Recognize the ordered pair of the graphical solution to a system of two linear equations when given a graph with only one point, the solution, labeled with the ordered pair.	Identify the ordered pair of the point of intersection as the graphical solution to a system of two linear equations when given one labeled point at the point of intersection.	Identify the ordered pair of the graphical solution to a system of two linear equations when given more than one labeled point with one at the point of intersection.
MAE HS.A.2.b	Given a graph of a linear function and the coordinate pair for the point where $y = 0$, recognize the point where $y = 0$ (e.g., Which point has a y -value of 0?).	Given a graph of a linear function and the coordinate pairs for three points on the line, identify the point where $y = 0$ (e.g., Which point has a y -value of 0?).	Given a graph of a linear function with a point where $y = 0$, determine the coordinate pair where $y = 0$ (e.g., What is the coordinate pair for this point?).
MAE HS.A.2.d	Given an x - y table of values and a grid with the values graphed and connected by a line, recognize the vertical or horizontal line formed.	Given an x - y table of values and a grid with the values graphed, determine whether the values form a horizontal line or a vertical line.	Given an x - y table of values and a grid with no values graphed, determine whether the graph of the values would form a horizontal line or a vertical line.
MAE HS.A.2.f	Recognize parallel, perpendicular, and intersecting lines on a coordinate grid when given a model.	Distinguish between parallel and intersecting lines on a coordinate grid. Distinguish between parallel and perpendicular lines on a coordinate grid.	Distinguish between perpendicular and intersecting lines on a coordinate grid.
MAE HS.G.1.b	Identify corresponding angles by position on congruent triangles when given a definition of corresponding angles and/or a model, limited to triangles that have the same orientation.	Identify corresponding angles by position on similar triangles when given a definition of corresponding angles and/or a model, limited to triangles that have the same orientation.	Identify corresponding angles by position on congruent triangles and similar triangles, limited to triangles that have the same orientation.

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MAE HS.G.1.d	Recognize the longest side, or the side opposite the right angle, in a right triangle.	Identify the hypotenuse and legs of a triangle when given a definition of hypotenuse or legs and/or a model.	Identify the legs and the hypotenuse of a right triangle.
MAE HS.G.1.h	Identify a two-dimensional polygon that has four sides as a quadrilateral. Recognize a parallelogram, a rectangle, a square, and a kite when given an identical model.	Identify a parallelogram, rectangle, square, and kite.	Distinguish between quadrilaterals that are parallelograms and quadrilaterals that are not parallelograms.
MAE HS.G.1.i	Identify a rectangle, square, or kite on a coordinate grid when other distractors are not quadrilaterals.	Identify a parallelogram, rectangle, square, and kite on a coordinate grid.	Identify whether a quadrilateral on a grid is a parallelogram.
MAE HS.G.1.j	Recognize a chord, radius, diameter, or arc of a circle when given an identical model.	Identify a chord, radius, diameter, or arc of a circle when given a definition of a chord, radius, diameter, or arc and/or a model. Identify the arc length as one-fourth, one-half, or three-fourths of a circle.	Differentiate between a chord, radius, diameter, and arc of a circle.
MAE HS.G.2.c	Find the area of one face of a rectangular prism by counting unit squares.	Use side lengths to find the area of one face of a rectangular prism when given the formula to find area.	Find the area of one face of a rectangular prism.
MAE HS.G.4.d	Recognize an isosceles, equilateral, or scalene triangle when given an identical model, limited to triangles not on a coordinate grid.	Identify an isosceles, equilateral, or scalene triangle on and off a coordinate grid when given a definition of isosceles, equilateral, or scalene triangle and/or a nonidentical example.	Identify isosceles, equilateral, or scalene triangles on and off a coordinate grid.
MAE HS.D.1.a	Recognize that investigative questions are answered using data.	Identify one method to collect data to answer an investigative question.	Determine more than one method to collect data to answer an investigative question.
MAE HS.D.1.b	Recognize the first step that could be used to collect data for an investigative question of interest.	Identify a sequence of steps that could be used to collect data for an investigative question of interest.	Follow a plan to collect data for an investigative question of interest.
MAE HS.D.1.c	Recognize different types of technology that could be used to organize data collected for an investigative question of interest.	Identify the most appropriate technology that could be used to organize data collected for an investigative question of interest.	Use appropriate technology to organize data collected for an investigative question of interest.
MAE HS.D.1.d	Recognize that a survey is a study that gathers data by asking people questions.	Identify the difference between a survey and an experiment (a procedure done to prove or find an answer to a question).	Identify the difference between a survey, an experiment, and an observational study.

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MAE HS.D.2.e	Recognize characteristics in a two-way frequency table (e.g., title, categories).	Identify quantities in a two-way frequency table.	Interpret categorical data to make comparisons of quantities represented in a two-way frequency table.
MAE HS.D.2.f	Given a scatter plot with a clear trend, recognize a positive or negative trend when given a model.	Given a scatter plot with a clear trend, determine whether there is a positive or negative association when given a definition of a positive or negative association and/or an example.	Given a scatter plot with a clear trend, determine whether there is a positive or negative association.
MAE HS.D.3.d	Recognize two events that cannot happen at the same time.	Identify mutually exclusive outcomes for a given scenario that has only mutually exclusive outcomes.	Identify mutually exclusive outcomes for a given scenario that has mutually and non-mutually exclusive outcomes.