Maryland
STATE DEPARTMENT OF EDUCATION

DRAFT Integrated Algebra 1

Maryland College and Career Ready Standards for Mathematics

Standards Crosswalk Document

Mathematics Branch

May 2025

Number and Operation Sense (NOS)

Previously Number and Quantity (N)

THIS IS NO LONGER A CLUSTER
PREVIOUSLY N.RN THE REAL NUMBER SYSTEM

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[Not applicable]	Enrichment opportunity	**N.RN.B.3**	Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.

THIS IS NO LONGER A CLUSTER
PREVIOUSLY N.Q QUANTITIES

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[Not applicable]	Included in Math 7 through Integrated Algebra 2 as a math practice.	**N.Q.A.1**	Use units as a way to understand problems and to guide the solution of multistep problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
[Not applicable]	Embedded in Modeling Evidence Statements	**N.Q.A.2**	Define appropriate quantities for the purpose of descriptive modeling. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
[Not applicable]	Included in Math 7 through Integrated Algebra 2 as a math practice.	**N.Q.A.3**	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

Algebraic Thinking (AT)

Previously Algebra (A); Functions (F)

IA1.AT.A LOOK FOR AND MAKE USE OF STRUCTURE TO REWRITE EXPRESSIONS IN EQUIVALENT FORMS AND REASON ABOUT THEIR PROPERTIES

PREVIOUSLY A.SSE.A INTERPRET THE STRUCTURE OF EXPRESSIONS; A.SSE.B WRITE EXPRESSIONS IN EQUIVALENT FORMS TO SOLVE PROBLEMS; A.APR.A PERFORM ARITHMETIC OPERATIONS ON POLYNOMIALS; A.APR.B UNDERSTAND THE RELATIONSHIP BETWEEN ZEROS AND FACTORS OF POLYNOMIALS

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IA1.AT.A.1	Rewrite and interpret linear and exponential expressions to explain key properties of a relationship. a. Interpret components of linear and exponential expressions (e.g., coefficients, constants, bases, and exponents) as single entities and explain their meaning in context. b. Rewrite linear and exponential expressions in different equivalent forms to highlight and explain properties of the relationship (e.g., growth or decay rate, initial value, rate of change). c. Compare equivalent forms of linear and exponential expressions to determine which is most useful for understanding or solving a problem in context.	**A.SSE.A.1** **A.SSE.A.2** **A.SSE.B.3** **A.LE.B.5**	Interpret expressions that represent a quantity in terms of its context. a. Interpret parts of an expression, such as terms, factors, and coefficients. b. Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $A = P(1 + r)^t$ as the product of P and a factor not depending on P. Use the structure of an expression to identify ways to rewrite it Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression~~. a. Factor a quadratic expression to reveal the zeros of the function it defines. b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines~~. c. Use the properties of exponents to transform expressions for exponential functions. Interpret the parameters in a linear or exponential function in terms of a context.

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[Not applicable]	In Integrated Algebra 2	**A.APR.A.1**	Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.
[Not applicable]	In Integrated Algebra 2	**A.APR.B.3**	Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.

IA1.AT.B MAKE SENSE OF AND SOLVE EQUATIONS, INEQUALITIES, AND SYSTEMS OF EQUATIONS OR INEQUALITIES. PREVIOUSLY CED.A CREATE EQUATIONS THAT DESCRIBE NUMBERS OR RELATIONSHIPS; REI.A UNDERSTAND SOLVING EQUATIONS AS A PROCESS OF REASONING AND EXPLAIN THE REASONING; REI.B SOLVE EQUATIONS AND INEQUALITIES IN ONE VARIABLE; REI.C SOLVE SYSTEMS OF EQUATIONS; REI.D REPRESENT AND SOLVE EQUATIONS AND INEQUALITIES GRAPHICALLY.

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IA1.AT.B.2	Create and solve one-variable equations, justify the solution process, and interpret the solution(s) in context. a. Create linear and exponential equations in one variable to represent mathematical or real-world situations. b. Accurately and efficiently solve linear equations in one variable. Justify the solution process using logical steps and explanations. Interpret the meaning of the solution(s) in context. c. Solve absolute value equations in one variable where the absolute value expression is isolated on one side of the	**CED.A.1** **REI.A.1** **REI.B.3**	Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and ~~quadratic functions~~, and ~~simple rational~~ and exponential functions. Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. Solve linear equations and ~~inequalities~~ in one variable, including equations with coefficients represented by letters.

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	equation. Justify the solution process and interpret the solution(s) in context. d. Solve exponential equations where both sides have comparable exponential expressions, requiring at most two steps to rewrite expressions to the same base, and explain the reasoning using properties of exponents.		
IA1.AT.B.3	Create and solve one-variable inequalities, justify the solution process, and interpret the solutions in context. a. Create inequalities in one variable to represent constraints or conditions in mathematical or real-world situations. b. Accurately and efficiently solve linear inequalities in one variable, including those with variables on both sides. Represent the solution set using a number line or inequality notation. c. Solve absolute value inequalities in one variable where the absolute value expression is isolated on one side of the inequality. Represent the solution set using compound inequalities or a number line. d. Interpret the meaning of the solution set in the context of the problem, including what values are reasonable within the given situation.	**REI.B.3**	Solve linear ~~equations~~ and inequalities in one variable, including equations with coefficients represented by letters.

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IA1.AT.B.4	Create linear and exponential equations in two variables, graph them, and use those graphs to represent and solve problems in context. a. Create linear and exponential equations in two variables to model mathematical or contextual relationships, and graph them on the coordinate plane. b. Use the understanding that the graph of an equation represents the set of all its solutions to identify solutions, describe patterns, and interpret the relationship between variables in context.	**CED.A.2** **REI.D.10**	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).
IA1.AT.B.5	Create, solve, and analyze systems of two linear equations in two variables. a. Create systems of linear equations to represent mathematical or real-world contexts. b. Solve systems of linear equations using algebraic methods (i.e., substitution and linear combination). c. Approximate or verify solutions to systems of equations by graphing and identifying the point of intersection. d. Interpret the meaning of the solution in context.	**CED.A.3** **REI.C.5** **REI.C.6** **REI.D.11**	Represent constraints by equations or ~~inequalities~~, and by systems of equations and/or ~~inequalities~~, and interpret solutions as viable or nonviable options in a modeling context Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. Explain why the x-coordinates of the points where the graphs of the equations $y=f(x)$ and $y=g(x)$ intersect are the solutions of the equation $f(x)=g(x)$; find the solutions

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			approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations.
IA1.AT.B.6	Create linear inequalities in two variables to represent constraints in context and graph the solution set as a half-plane within the coordinate plane.	**REI.D.12**	Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and ~~graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes~~.
IA1.AT.B.7	Represent and analyze systems of two linear inequalities in two variables. a. Create systems of linear inequalities in two variables to represent constraints or relationships in context. b. Graph the solution set to a system of linear inequalities as the intersection of the corresponding half-planes. c. Interpret the meaning of the solution set in context and determine whether potential ordered pairs are solutions to the system.	**CED.A.3** **REI.D.12**	Represent constraints by ~~equations~~ or inequalities, and by systems of ~~equations~~ and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.
IA1.AT.B.8	Model and solve optimization problems using systems of linear inequalities. a. Represent contexts involving constraints and an objective to optimize (i.e., maximize or minimize) using a system of linear inequalities. b. Graph the feasible region and identify solutions that satisfy all constraints.	**[Not applicable]**	New standard

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	c. Identify and justify the optimal solution(s) based on the objective, and interpret the meaning in context.		
IA1.AT.B.9	Use technology to solve systems of equations consisting of a linear equation and an exponential in two variables and interpret the solution within a given context.	**[Not applicable]**	New standard
[Not applicable]	In Integrated Algebra 2	**CED.A.4**	Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
[Not applicable]	In Integrated Algebra 2	**REI.B.4**	Solve quadratic equations in one variable.

IA1.AT.C REASON ABOUT FUNCTIONS

PREVIOUSLY A.IF.A UNDERSTAND THE CONCEPT OF A FUNCTION AND USE FUNCTION NOTATION; A.IF.B INTERPRET FUNCTIONS THAT ARISE IN APPLICATIONS IN TERMS OF THE CONTEXT A.IF.C ANALYZE FUNCTIONS USING DIFFERENT REPRESENTATIONS

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IA1.AT.C.10	Identify, represent, and analyze functions in terms of their domain and range. a. Determine whether a relationship is a function by verifying that each element of the domain is assigned to exactly one element of the range using tables, graphs, and equations. b. Determine whether a function is one-to-one by analyzing tables, graphs, or equations,	**A.IF.A.1** **A.IF.A.2**	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y=f(x)$

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	and justify the reasoning based on the relationship between inputs and outputs. c. Use function notation $f(x)$ to evaluate functions for specific input values, x, and describe how the output changes with respect to the input. Interpret the meaning of both specific values and patterns in context. d. Represent the graph of a function as the set of ordered pairs (x, $f(x)$) and explain how it illustrates the relationship between domain and range.		Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
IA1.AT.C.11	Calculate or estimate and interpret the average rate of change over a specified interval of a linear or exponential function presented graphically, symbolically, or in a table.	**A.IF.B.6**	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
IA1.AT.C.12	Compare the properties of two functions, one linear and one exponential, when each is represented in a different way (algebraically, graphically, numerically in tables, or by narrative descriptions)	**A.IF.C.9**	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions)

IA1.AT.D MODEL WITH FUNCTIONS

PREVIOUSLY A.IF.A UNDERSTAND THE CONCEPT OF A FUNCTION AND USE FUNCTION NOTATION; A.IF.B INTERPRET FUNCTIONS THAT ARISE IN APPLICATIONS IN TERMS OF THE CONTEXT A.IF.C ANALYZE FUNCTIONS USING DIFFERENT REPRESENTATIONS; A.BF.A BUILD A NEW FUNCTION THAT MODELS A RELATIONSHIP BETWEEN TWO QUANTITIES; A.BF.B BUILD NEW FUNCTIONS FROM EXISTING FUNCTIONS; F.LE.A CONSTRUCT AND COMPARE LINEAR, QUADRATIC, AND EXPONENTIAL MODELS AND SOLVE PROBLEMS; F.LE.B INTERPRET EXPRESSIONS FOR FUNCTIONS IN TERMS OF THE SITUATION THEY MODEL.

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IA1.AT.D.13	Analyze and model arithmetic and geometric sequences using recursive and explicit representations. a. Identify whether a sequence is arithmetic or geometric and create an explicit rule to describe the pattern. b. Rewrite a recursive representation of an arithmetic or geometric sequence to an explicit rule. c. Model real-world contexts involving arithmetic or geometric patterns using an explicit or recursive rule, and use the rule to solve problems.	**IF.A.3** **BF.A.1** **LE.A.2**	Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. Write a function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process, or steps for calculation from a context. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).
IA1.AT.D.14	Represent functions using tables and graphs, and interpret key features in context. Key features include: domain, intercepts, intervals of increase and decrease, positive and negative values, end behavior, and points of transition between pieces. a. Analyze linear and exponential functions by identifying patterns in tables and graphs. Distinguish between constant and proportional growth, and interpret functions' key features in context.	**IF.B.4** **IF.B.5** **IF.C.7**	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; ~~relative maximums and minimums; symmetries; end behavior; and periodicity~~

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	b. Extend the understanding of functions to include piecewise-defined and absolute value functions. Represent them in tables and graphs, interpret key features in context, and explain how absolute value functions can be represented as a specific case of piecewise functions. c. Relate key features of a function's graph and table to the characteristics of a context, and justify the appropriateness of a function model based on the situation.		Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and ~~quadratic functions~~ and show intercepts, ~~maxima, and minima~~. Graph ~~square root, cube root~~, and piecewise-defined functions, including ~~step functions and~~ absolute value functions.
IA1.AT.D.15	Distinguish between situations that can be modeled with linear functions and with exponential functions. a. Show that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals. b. Given a relationship in context where the rate of change over equal intervals is constant, identify it as linear and create a linear function to model the relationship. c. Given a relationship in context where a quantity changes by a constant percent per unit interval relative to another, identify it as exponential and create an exponential function to model the relationship.	**A.LE.A.1**	Distinguish between situations that can be modeled with linear functions and with exponential functions. a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

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IA1.AT.D.16	Analyze how changes to a function's input or output affect the graph and its meaning in context. a. Identify how replacing $f(x)$ with $f(x+k)$ and $f(x)+k$ changes the graph of a linear, exponential, or absolute value function. Describe the direction of the change and determine the value of k when given a graph. b. Explain how changing the input or output affects the quantities represented by the function in context and use the structure of the parent function to support reasoning.	**BF.B.3**	Identify the effect on the graph of replacing $f(x)$ by $f(x)+k$, $kf(x)$, $f(kx)$ and $f(x+k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. ~~Include recognizing even and odd functions from their graphs and algebraic expressions for them.~~
IA1.AT.D.17	Find and interpret the inverse of a linear function in context. a. Determine whether a linear function is one-to-one and therefore has an inverse that is also a function. b. Find the inverse of a linear function represented with an equation or a table. c. Interpret the meaning of the inverse in context as reversing the original input-output relationship.	**[New standard]**	New standard
[Not applicable]	In Integrated Algebra 2	**LE.A.3**	Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function

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[Not applicable]	In Integrated Algebra 2	**IF.C.8**	Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.

Geometric Reasoning (GR)

Previously not a domain

IA1.GR.A REASON ABOUT TRANSFORMATIONS AND CONGRUENCE

PREVIOUSLY (FROM GEOMETRY) G.CO.A EXPERIMENT WITH TRANSFOMATIONS IN THE PLANE; G.CO.B UNDERSTAND CONGRUENCE IN TERMS OF RIGID MOTIONS; G.GPE.B USE COORDINATES TO PROVE SIMPLE GEOMETRIC THEOREMS ALGEBRAICALLY

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IA1.GR.A.1	Apply definitions of rotations, reflections, and translations to transform figures and use these transformations to verify congruence. a. Describe rotations, reflections, and translations as functions that take points in the plane as inputs and give corresponding points as outputs. b. Verify experimentally that rigid transformations preserve distance, angle measure, and parallelism, and use	**G.CO.A.2** **G.CO.B.6**	Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of

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	this understanding to justify congruence.		congruence in terms of rigid motions to decide if they are congruent.
IA1.GR.A.2	Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.	**G.CO.B.7** **G.CO.B.8**	Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

IA1.GR.B CONJECTURE ABOUT AND VERIFY GEOMETRIC RELATIONSHIPS

PREVIOUSLY (FROM GEOMETRY) G.CO.B UNDERSTAND CONGRUENCE IN TERMS OF RIGID MOTIONS; G.CO.C PROVE GEOMETRIC THEOREMS; G.GPE.B USE COORDINATES TO PROVE SIMPLE GEOMETRIC THEOREMS ALGEBRAICALLY

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IA1.GR.B.3	Apply triangle congruence theorems (SSS, SAS, ASA, AAS, HL) to reason logically about geometric diagrams, including verifying congruence and solving for unknown measures.	**G.CO.B.8**	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.
IA1.GR.B.4	Understand and apply theorems and criteria for parallel and perpendicular lines. a. Use theorems about parallel lines cut by a transversal to identify and apply angle pair relationships, including corresponding, alternate interior, alternate exterior, and consecutive interior angles. b. Verify the slope criteria for parallel and perpendicular lines and apply them to solve	**G.CO.C.9** **G.GPE.B.5**	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the

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	geometric problems (e.g., determine when lines are parallel or perpendicular and find equations of lines that satisfy given geometric conditions).		equation of a line parallel or perpendicular to a given line that passes through a given point).
IA1.GR.B.5	Use angle relationships and slope criteria to verify properties of parallelograms. a. Use angle relationships from parallel lines and transversals, along with triangle congruence theorems, to verify properties of parallelograms, including congruent opposite sides, congruent opposite angles, and diagonals that bisect each other. b. Apply the slope criteria for parallel and perpendicular lines to verify when a quadrilateral is a parallelogram in a coordinate plane.	**CO.C.11** **GPE.B.4**	Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals. Use coordinates to prove simple geometric theorems algebraically.

Reasoning with Data, Statistics, and Probability (DS)

Previously Statistics (S)

IA1.DS.A MAKE SENSE OF STATISTICAL INQUIRY

PREVIOUSLY (FROM ALGEBRA 1) S.ID.C INTERPRET LINEAR MODELS; (FROM STATISTICS) S.IC.A UNDERSTAND AND EVALUATE RANDOM PROCESSES UNDERLYING STATISTICAL EXPERIMENTS; S.IC.B MAKE INFERENCES AND JUSTIFY CONCLUSION FROM SAMPLE SURVEYS, EXPERIMENTS AND OBSERVATIONAL STUDIES

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IA1.DS.A.1	Distinguish between correlation and causation.	**S.ID.C.9**	Distinguish between correlation and causation.
IA1.DS.A.2	Understand and apply statistics as a process for making inferences about population parameters using random samples. a. Explain the importance of randomization in selecting samples to ensure unbiased and representative data. b. Analyze the representativeness of a sample and its implications for making inferences about the population.	**S.IC.A.1**	Understand statistics as a process for making inferences about population parameters based on a random sample from that population.
IA1.DS.A.3	Analyze and interpret how data are represented and used in arguments or reports. a. Identify key components of data-based arguments, including claims, visualizations (e.g., graphs, tables), and the statistical language used to support conclusions. b. Evaluate the accuracy and effectiveness of visualizations in representing data and supporting a claim or conclusion.	**S.IC.B.6**	Evaluate reports based on data.

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	c. Describe how data were collected and whether the method (e.g., sampling, use of randomization) supports valid conclusions.		
IA1.DS.A.4	Plan statistical investigations. a. Formulate statistical questions that can be answered with data. b. Determine effective data collection methods that enhance accuracy, validity, and representativeness of the data.	**S.IC.B.7**	Conduct statistical investigations.

IA1.DS.B DESCRIBE, ANALYZE, AND COMPARE DATA USING VISUAL AND NUMERICAL REPRESENTATIONS TO MODEL SITUATIONS AND DRAW INFERENCES.

PREVIOUSLY (FROM ALGEBRA 1) S.ID.B SUMMARIZE, REPRESENT, AND INTERPRET DATA ON TWO CATEGORICAL AND QUANTITATIVE VARIABLES; S.ID.C INTERPRET LINEAR MODELS; (FROM STATISTICS) S.ID.A SUMMARIZE, REPRESENT, AND INTERPRET DATA ON A SINGLE COUNT OR MEASUREMENT VARIABLE.

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IA1.DS.B.5	Analyze and compare one-variable data visualizations on the real number line to draw conclusions. a. Compare multiple data visualizations to identify the unique statistical information each provides and their usefulness in different contexts. b. Analyze and compare the shape, center, and spread of data sets using appropriate visualizations.	**S.ID.A.1**	Represent data with plots on the real number line (dot plots, histograms and box plots

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IA1.DS.B.6	Construct and interpret two-way frequency tables to analyze associations between two categorical variables. a. Use the tables to decide if events are independent b. Use the tables to find joint and marginal probabilities.	**S.ID.B.5**	Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.]
IA1.DS.B.7	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. a. Fit a linear or exponential function to data; use functions fitted to data to solve problems in the real-world context of the data. b. Informally assess the fit of a linear or exponential function visually by analyzing the graph and analytically by evaluating the appropriateness of the chosen model in representing the data and context.	**S.ID.B.6**	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, ~~quadratic~~, and exponential models. b. Informally assess the fit of a function by plotting and analyzing residuals. c. Fit a linear function for a scatter plot that suggests a linear association.
IA1.DS.B.8	Analyze and interpret the key components of linear and exponential models in the context of the data with and without technology. a. Interpret slope (rate of change) and the intercept (constant term) of a linear model to describe patterns and relationships in the data. b. Analyze the growth factor or rate of change in exponential models to describe patterns,	**S.ID.C.7**	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

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	interpret trends, and make predictions in context.		