## Math

Name\_\_\_\_\_

Number Sense	
Extend the properties of exponents to rational exponents.	TABE
Date of Mastery	А
Rewrite expressions involving radicals and rational exponents using properties of exponents (N.RN.2)	
Reason Quantitatively and use units to solve problems.	-
Use units as a way to understand problems and guide the solution of multi-step problems. Choose units	18
consistently in formulas, graphs, and data displays (N.Q.1)	
Choose a level of accuracy appropriate to limitation on measurement when reporting quantities (N.Q.3)	33
Algebra	
Interpret the structure of expressions.	
Interpret expressions that represent a quantity in terms of its context (A.SSE.1)*	1, 3A, 3B, 25
Use the structure of an expression to identify ways to rewrite it $(x^4-y^4=(x^2)^2-(y^2)^2=(x^2-y^2)(x^2+y^2))$ (A.SSE.2)	27
Write expressions in equivalent forms to solve problems.	
Choose and produce an equivalent form of an expression to explain properties of the quantity represented	
by the expression (A.SSE.3)*	
Perform arithmetic operations on polynomials.	
	30, 34
Understand that the system of polynomials are closed operations of addition, subtraction and	22, 31B,
multiplication. Be able to add, subtract, and multiply polynomials (A.APR.1)	33
Rewrite rational expressions.	•
Rewrite simple rational expressions in different forms (A.APR.6)	31A
Create equations that describe numbers or relationships.	
	4, 21A,
Create equations and inequalities in one variable and use them to solve problems (A.CED.1)	21B, 35
	12, 24, 34
Create equations in two or more variables to show relationships between quantities and graph (A.CED.2)	17, 27 <b>2</b>
Represent constraints by equations or inequalities, by systems of equations and/or inequalities and	
interpret solutions as viable or non-viable (A.CED.3)	
Rearrange formulas to highlight a quantity of interest, use same reasoning as solving equations (A.CED.4)	22
Understand solving equations as a process of reasoning and explain the reasoning.	
Explain each step to solve a simple equation. Construct viable arguments to justify the method (A.REI.1)	8, 11, 31
	40
Solve simple rational and radical equations in one variable (A.REI.2)	18, 23, 37,
	40
Solve equations and inequalities in one variable.	
Solve linear equations and inequalities in one variable, including coefficients using letters (A.REI.3)	
Solve quadratic equations in one variable (A.REI.4)	15
Solve quadratic equations in one variable (A.N.E+)	19
Solve systems of equations.	
Solve systems of linear equations, focus on pairs of equations with two variables (A.REI.6)	6
Represent and solve equations and inequalities graphically.	
Understand the graph of an equation in two variables is the set of all its solutions (A.REI.10)	

Under	stand the concept of a function and use function notation.	
	Understand the function from one set (domain) to another set (range) assigns each element of the domain	
	exactly one element of the range (F.IF.1)	
	Use function notation, evaluate functions for inputs and interpret statements that use function notation (F.IF.2)	8, 10
Interp	ret functions that arise in applications in terms of the context.	1 0, 10
	Interpret key features of graphs and tables in terms of quantities for a function (F.IF.4)	3, 4, 20, 26
	Relate the domain of a function to its graph and to the relationship it describes (F.IF.5)	2, 6 <b>7, 17</b>
	Calculate and interpret the rate of change of a function (F.IF.6)	23, 28, 36, 38A, 38B 1, 5, 10, 14, 25A, 25B, 35
Analyz	e functions using different representations.	<del>,                                      </del>
	Graph functions expressed symbolically and show key features (F.IF.7)	29, 38
	Use properties of exponents to interpret expressions for exponential functions (F.IF.8b)	13, 16, 24, 26
	Compare properties of two functions represented in different ways (F.IF.9)	
Build a	function that models a relationship between two quantities.	L
	Write a function that describes a relationship between two quantities (F.BF.1)	
Constr	uct and compare linear, quadratic, and exponential models and solve problems.	
	Distinguish between situations that can be modeled with linear or exponential functions (F.LE.1)*	16
Interp	ret expressions for functions in terms of the situation they model.	
	Interpret the parameters in a linear or exponential function in terms of context (F.LE.5)	9, 13
	Geometry	
Experi	ment with transformations in the plane.	
	Know definitions of angle, circle, perpendicular, parallel, and line segment based on notions of point, line,	
	distance along line, and distance around a circular arc (G.CO.1)	15
Prove	theorems involving similarity.	
	Use congruence and similarity criteria for triangles to solve problems and prove relationships (G.SRT.5)	39 <b>21</b>
Explair	volume formulas and use them to solve problems.	
	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems (G.GMD.3)	20, 29, 32 <b>30, 39</b>
Apply	geometric concepts in modeling situations.	•
	Apply concepts of density based on area and volume in modeling situations (G.MG.2)	18 <b>36</b>
	Statistics and Probability	
Summ	arize, represent, and interpret data on a single count or measurable variable.	
	Represent data with plots on the number line (dot plots, histograms, and box plots) (S.ID.1)	7, 10A, 10B <b>11, 13</b>
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<sup>\*</sup>See sub-standards in CCRS book Checklist created by Kerin Hanson with Bemidji ABE

	Interpret differences in shape, center, and spread in data sets, accounting for outliers (S.ID.3)	19 <b>32</b>
Summa	rize, represent, and interpret data on two categorical and quantitative variables.	
	Summarize data for two categories in two-way frequency tables. Interpret relative frequencies and	37
	recognize trends in the data (S.ID.5)	28
Interpre	et linear models.	
	Interpret the slope and intercept of a linear model in the context of the data (S.ID.7)	10
	Distinguish between correlation and sousation (S.ID.O)	5, 14
Distinguish between correlation and causation (S.ID.9)	Distinguish between correlation and causation (5.10.9)	10