

Level	Basic	Proficient	Advanced
Policy Level Descriptors	Marginal academic performance, work approaching, but not yet reaching, satisfactory performance, indicating partial understanding and limited display of the knowledge and skills included in the Wyoming Content and Performance Standards.	Satisfactory academic performance indicating a solid understanding and display of the knowledge and skills included in the Wyoming Content and Performance Standards.	Superior academic performance indicating an in-depth understanding and exemplary display of the knowledge and skills included in the Wyoming Content and Performance Standards.
Domain	Ratios and Proportional Relationships		
Range PLD: Cluster A - Understand ratio concepts and use ratio reasoning to solve problems.	Basic students write a ratio relationship between two quantities (6.RP.1);	Proficient students describe a ratio relationship between two quantities, including comparing one of the quantities to the total (6.RP.1);	
	Basic students write a unit rate to describe two quantities using whole numbers (6.RP.2);	Proficient students write a unit rate to describe two quantities using rational numbers and use unit rate language to describe two quantities (6.RP.2);	Advanced students explain the concept of a unit rate using unit rate language (6.RP.2);
	Basic students make tables of equivalent ratios relating quantities with whole number measurements and plot the pairs of values on the coordinate plane (6.RP.3);	Proficient students determine missing values in tables of equivalent ratios relating quantities with whole number measurements (6.RP.3);	Advanced students compare ratios using tables of equivalent ratios relating quantities with whole number measurements (6.RP.3);
	Basic students solve unit rate problems given the unit rate (6.RP.3);	Proficient students solve unit rate problems that require determining a unit rate (6.RP.3);	Advanced students solve unit rate problems that require determining two unit rates (6.RP.3);
	Basic students solve for a percent of a quantity given the whole of 10 or 100 (6.RP.3);	Proficient students solve, in a mathematical context, for a percent of a quantity as a rate per 100 and to solve problems that involve finding the whole, given the part and the percent (6.RP.3);	Advanced students solve, in a real-world context, for a percent of a quantity as a rate per 100 and to solve problems that involve finding the whole, given the part and the percent (6.RP.3);
	Basic students use ratio reasoning to convert measurement units within the same system (6.RP.3).	Proficient students use ratio reasoning to convert measurement units and to transform units appropriately when multiplying or dividing quantities (6.RP.3).	Advanced students use ratio reasoning to convert measurement units and transform units appropriately when multiplying and dividing in a real-world context (6.RP.3).

Level	Basic	Proficient	Advanced
Domain	The Number System		
Range PLD: Cluster B - Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	Basic students compute quotients of a fraction by a unit fraction (6.NS.1);	Proficient students compute quotients of any two fractions including a mixed number (6.NS.1);	
	Basic students solve problems in mathematical contexts involving division of a fraction by a unit fraction (6.NS.1).	Proficient students solve problems in mathematical contexts involving division of fractions by fractions (6.NS.1).	Advanced students interpret quotients of fractions by identifying real-world contexts (6.NS.1).
Range PLD: Cluster C - Compute fluently with multi-digit numbers and find common factors and multiples.	Basic students divide three-digit or four-digit dividends by two-digit divisors using the standard algorithm (6.NS.2);	Proficient students divide multi-digit numbers with fractional remainders using the standard algorithm (6.NS.2);	
	Basic students add, subtract, multiply, or divide decimals to tenths using the standard algorithms (6.NS.3);	Proficient students add, subtract, multiply, or divide decimals to hundredths using the standard algorithms (6.NS.3);	Advanced students add, subtract, multiply, or divide decimals to thousandths using the standard algorithms for each operation (6.NS.3);
	Basic students determine the greatest common factor of two whole numbers less than or equal to 20 and the least common multiple of two prime numbers less than or equal to 12 (6.NS.4).	Proficient students determine the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12 (6.NS.4).	Advanced students use the distributive property to express a sum of two whole numbers between 1 and 100 with a common factor times the sum of two whole numbers with no common factor (6.NS.4).
Range PLD: Cluster D - Apply and extend previous understandings of numbers to the system of rational numbers.		Proficient students represent quantities in real-world contexts using rational numbers; do simple applications involving positive and negative numbers (6.NS.5);	
	Basic students represent one integer on a horizontal number line (6.NS.6);	Proficient students represent two or more rational numbers on a horizontal number line (6.NS.6);	
	Basic students graph ordered pairs of integers in the first quadrant of a coordinate plane (6.NS.6);	Proficient students graph ordered pairs of integers in all four quadrants of a coordinate plane (6.NS.6);	Advanced students identify the quadrant a point lies in given descriptions of its coordinates with real-world context (6.NS.6);
	Basic students compare a positive and a negative number (6.NS.7);	Proficient students compare two or more rational numbers (6.NS.7);	Advanced students explain statements of order for rational numbers in real-world contexts (6.NS.7);
		Proficient students determine the absolute value of a rational number and explain the absolute value of any rational number as its distance from 0 on the number line (6.NS.7);	Advanced students explain statements of order of absolute values (6.NS.7);
		Proficient students solve problems in both mathematical and real-world contexts by graphing points in all four quadrants of the coordinate plane (6.NS.8);	
	Basic students use coordinates to find distances between points with the same first coordinate or the same second coordinate in the first quadrant (6.NS.8).	Proficient students use coordinates to find distances between points with the same first coordinate or the same second coordinate in all four quadrants (6.NS.8).	Advanced students use coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate in all four quadrants (6.NS.8).

Level	Basic	Proficient	Advanced
Domain	Expressions and Equations		
Range PLD: Cluster E - Apply and extend previous understandings of arithmetic to algebraic expressions.	Basic students write and evaluate one-step numerical expressions involving one whole number exponent (6.EE.1);	Proficient students write and evaluate multi-step numerical expressions involving whole number exponents (6.EE.1);	Advanced students write and evaluate numerical multi-step expressions involving the distributive property and whole number exponents (6.EE.1);
	Basic students write and read one-step expressions with rational numbers with variables (6.EE.2);	Proficient students write and read two-step expressions with rational numbers with variables (6.EE.2);	Advanced students write and read three-step or four-step expressions with rational numbers with variables (6.EE.2);
	Basic students evaluate one-step or two-step expressions with whole numbers given the value of the variable, using the order of operations (6.EE.2);	Proficient students evaluate expressions with up to three steps given the values of up to two variables, using the order of operations (6.EE.2);	Advanced students evaluate expressions with more than three steps given the values of up to two variables, using the conventional order of operations (6.EE.2);
		Proficient students identify parts of an expression using mathematical language (6.EE.2);	
	Basic students apply the properties of operations to identify equivalent expressions based on the commutative property (6.EE.3).	Proficient students apply the properties of operations to identify and generate equivalent expressions (6.EE.3).	Advanced students explain why two expressions are equivalent (6.EE.3, 4).
Range PLD: Cluster F - Reason about and solve one-variable equations and inequalities.		Proficient students understand solving a one-variable equation or one-variable inequality as a process of answering the question “which values from a specified set, if any, make the equation or inequality true?” (6.EE.5);	
	Basic students use substitution to determine whether a given whole number in a specified set makes a one-step equation or a one-step inequality true (6.EE.5);	Proficient students use substitution to determine whether a given non-negative rational number in a specified set makes a one-step equation or a one-step inequality true (6.EE.5);	Advanced students use substitution to determine whether a given rational number in a specified set makes a two-step equation or a two-step inequality true;
	Basic students understand that a variable represents an unknown number (6.EE.6);	Proficient students understand and use variables to represent numbers and write expressions with only one operation and only one variable when solving problems in both mathematical and real-world contexts (6.EE.6);	Advanced students understand and use variables to represent numbers and write expressions with two or more operations and only one variable when solving problems in both mathematical and real-world contexts;
	Basic students solve both mathematical and real-world contexts by solving equations of the form $x + p = q$ or $x - p = q$ for cases in which p , q and x are all whole numbers (6.EE.7);	Proficient students solve problems in both mathematical and real-world contexts by writing and solving equations of the form $x + p = q$, $x - p = q$, $px = q$, and $x/p = q$ for cases in which p , q , and x are all whole numbers or positive rational numbers (6.EE.7);	Advanced students solve both mathematical and real-world contexts by writing and solving equations of the form $x + p = q$, $x - p = q$, $px = q$, and $x/p = q$ for cases in which p , q , and x are all non-negative rational numbers (6.EE.7);
	Basic students write an inequality of the form $x > c$ or $x < c$ to represent a mathematical context (6.EE.8).	Proficient students write an inequality of the form $x > c$ or $x < c$ to represent real world contexts and recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions and represent and interpret solutions of inequalities on number line diagrams (6.EE.8).	Advanced students write an inequality of the form $x \geq c$ or $x \leq c$ to represent real world contexts, recognize that inequalities of the form $x \geq c$ or $x \leq c$ have infinitely many solutions, and represent and interpret solutions of inequalities of the form $x \geq c$ or $x \leq c$ on number line diagrams.

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Domain	Expressions and Equations (cont.)		
Range PLD: Cluster G - Represent and analyze quantitative relationships between dependent and independent variables.	Basic students describe in words the apparent relationship between the values of two variables given in a table (6.EE.9).	Proficient students write equations to represent the apparent relationship between the values of two variables given in a table or a graph (6.EE.9).	Advanced students analyze the relationship between the dependent and independent variables using graphs and tables and relate these to the equation (6.EE.9).
Domain	Geometry		
Range PLD: Cluster H - Solve real-world and mathematical problems involving area, surface area, and volume.	Basic students determine the area of right triangles by composing into rectangles in both mathematical and real-world contexts (6.G.1);	Proficient students determine the area of triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes in both mathematical and real-world contexts (6.G.1);	Advanced students find a missing dimension given the area of a triangle or a special quadrilateral and all but one dimension;
	Basic students apply the formulas $V = lwh$ to find volumes of right rectangular prisms with two whole-number edge lengths and one fractional edge length in both mathematical and real-world contexts (6.G.2);	Proficient students apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in both mathematical and real-world contexts (6.G.2);	Advanced students apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths and perform additional operations with the volume to solve real-world problems (6.G.2);
	Basic students solve for the area of a rectangle given the coordinates of three points, one being the origin, on the coordinate plane in both mathematical and real-world contexts (6.G.3);	Proficient students solve for the area of a rectangle given the coordinates of three vertex points, excluding the origin, on the coordinate plane in both mathematical and real-world contexts (6.G.3);	Advanced students solve for the area of a right triangle or a rectangle given coordinates for two points on the coordinate plane to solve problems in both mathematical and real-world contexts (6.G.3);
	Basic students identify the net of a right prism (6.G.4).	Proficient students represent three-dimensional figures using nets made up of rectangles and triangles and use nets to find the surface area of three-dimensional figures (6.G.4).	Advanced students use nets to find the surface area of three-dimensional figures in both mathematical and real-world contexts (6.G.4).

Level	Basic	Proficient	Advanced
Domain	Statistics and Probability		
Range PLD: Cluster I - Develop understanding of statistical variability.		Proficient students recognize a statistical question as one that anticipates variability (6.SP.1);	Advanced students create a statistical question as one that anticipates variability;
		Proficient students understand that a set of data can be described by its center, spread, and overall shape (6.SP.2);	Advanced students make generalizations about the center, the spread, and the overall shape of the distribution of a numerical data set presented in a graph (6.SP.2);
	Basic students understand that the mean and the median are measures of center (6.SP.3).	Proficient students understand that the mean and the median are measures of center, and the mean absolute deviation and the interquartile range are measures of variation for a numerical data set (6.SP.3).	Advanced students make generalizations about the mean absolute deviation and the interquartile range as measures of variation for a numerical data set (6.SP.3).
Range PLD: Cluster J - Summarize and describe distributions.		Proficient students display numerical data in plots on a number line, including dot plots, histograms, and box plots (6.SP.4);	
	Basic students report the number of observations found in a numerical data set (6.SP.5).	Proficient students use data to describe the nature of an attribute under investigation, including how it was measured and its units of measurement (6.SP.5);	Advanced students use measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation) for a numerical data set to describe the distribution of the data without calculating the measures (6.SP.5);
		Proficient students calculate measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation) for a numerical data set (6.SP.5).	Advanced students demonstrate and describe the relationship between the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.