Code	**Descriptions**	**Pg. No.**	**Reference Example**	Page Link		
MA.912.AR.2.5	Solve and graph mathematical and real-world problems that are modeled with linear functions. Interpret key features and determine constraints in terms of the context.	389	Linear Functions and Their Graphs	https://wgdesigngroup.com/Pearson/survey_math/389		
		390	Example 3: Salary as a Linear Function	https://wgdesigngroup.com/Pearson/survey_math/390		
	Clarification 1: Key features are limited to domain, range, intercepts and rate of change.	400	Practice the Skills - Problem 19 to 21	https://wgdesigngroup.com/Pearson/survey_math/400		
	Clarification 2: Instruction includes the use of standard form, slope-intercept form and point-slope form.	390	Example 4: Graphing a Linear Function	https://wgdesigngroup.com/Pearson/survey_math/390		
	Clarification 3: Instruction includes representing the domain, range and constraints with inequality notation, interval notation or set-builder notation.	388 - 389	Fig 6.42 -What is the domain and range?	https://wgdesigngroup.com/Pearson/survey_math/388		
	Clarification 4: Within the Algebra 1 course, notations for domain, range and constraints are limited to inequality and set-builder.	NA	NA			
	Clarification 5: Within the Mathematics for Data and Financial Literacy course, problem types focus on money and business.	NA	NA			
MA.912.AR.5.3	Given a mathematical or real-world context, classify an exponential function as representing growth or decay.	398	Natural Exponential Growth or Decay Formula	https://wgdesigngroup.com/Pearson/survey_math/398		
		399	Example 13: World Population Growth	https://wgdesigngroup.com/Pearson/survey_math/399		
			Example 14: Evaluating an Exponential Decay Function	https://wgdesigngroup.com/Pearson/survey_math/		
	Clarification 1: Within the Algebra 1 course, exponential functions are limited to f(x)=ab^x where b is a whole number greater than 1 or a unit fraction, or f(x) = a (1±r)^x, where 0<r<1	NA				
MA.912.AR.5.4:	Write an exponential function to represent a relationship between two quantities from a graph, a written description or a table of values within a mathematical or real-world context.	395	Exponential Functions and Their Graphs	https://wgdesigngroup.com/Pearson/survey_math/395		
		395 - 396	Exponential Growth or Decay Formula	https://wgdesigngroup.com/Pearson/survey_math/395		
		398	Example 9: Carbon Dating	https://wgdesigngroup.com/Pearson/survey_math/398		
			Example 11	https://wgdesigngroup.com/Pearson/survey_math/		
	Clarification 1: Within the Algebra 1 course, exponential functions are limited to f(x)=ab^x where b is a whole number greater than 1 or a unit fraction, or f(x) = a (1±r)^x, where 0<r<1	NA				
	Clarification 2: Within the Algebra 1 course, tables are limited to having successive nonnegative integer inputs so that the function may be determined by finding ratios between successive outputs.	NA				
MA.912.AR.5.5	Given an expression or equation representing an exponential function, reveal the constant percent rate of change per unit interval using the properties of exponents. Interpret the constant percent	403	Problem 81	https://wgdesigngroup.com/Pearson/survey_math/403		
			Problem 82	https://wgdesigngroup.com/Pearson/survey_math/		
			Problem 83	https://wgdesigngroup.com/Pearson/survey_math/		
MA.912.AR.5.6	Given a table, equation or written description of an exponential function, graph that function and determine its key features.	395	Exponential Functions and Their Graphs	https://wgdesigngroup.com/Pearson/survey_math/395		
		396	Example 10	https://wgdesigngroup.com/Pearson/survey_math/396		
		398	Example 11	https://wgdesigngroup.com/Pearson/survey_math/398		
			Example 12	https://wgdesigngroup.com/Pearson/survey_math/		
	Clarification 1: Key features are limited to domain; range; intercepts; intervals where the function is increasing, decreasing, positive or	393	Example 8	https://wgdesigngroup.com/Pearson/survey_math/393		
		401	Exercises 53–60, g.	https://wgdesigngroup.com/Pearson/survey_math/401		
	Clarification 2: Instruction includes representing the domain and range with inequality notation, interval notation or set-builder notation.	396	Exponential Growth or Decay Formula	https://wgdesigngroup.com/Pearson/survey_math/396		
		401	Exercises 61–70	https://wgdesigngroup.com/Pearson/survey_math/401		

	Clarification 3: Within the Algebra 1 course, notations for domain and range are limited to inequality and set-builder.	NA				
	Clarification 4: Within the Algebra 1 course, exponential functions are limited to f(x)=ab^x where b is a whole number greater than 1 or a unit fraction, or f(x) = a (1±r)^x, where 0<r<1	NA				
MA.912.DP.1.1	Given a set of data, select an appropriate method to represent the data, depending on whether it is numerical or categorical data and on whether it is univariate or bivariate.	765	Mathematics Today	https://wgdesigngroup.com/Pearson/survey_math/765		
				https://wgdesigngroup.com/Pearson/survey_math/		
				https://wgdesigngroup.com/Pearson/survey_math/		
				https://wgdesigngroup.com/Pearson/survey_math/		
	Clarification 1: Instruction includes discussions regarding the strengths and weaknesses of each data display.	NA	NA			
	Clarification 2: Numerical univariate includes histograms, stem-and-leaf plots, box plots and line plots; numerical bivariate includes scatter plots and line graphs; categorical univariate includes bar charts, circle graphs, line plots, frequency tables and relative frequency tables; and categorical bivariate includes segmented bar	769	Problem 41, Problem 44	https://wgdesigngroup.com/Pearson/survey_math/769		
		771	Frequency Distributions	https://wgdesigngroup.com/Pearson/survey_math/771		
		774	Histograms	https://wgdesigngroup.com/Pearson/survey_math/774		
		805	Problem 36	https://wgdesigngroup.com/Pearson/survey_math/805		
		807	Figure 12.20	https://wgdesigngroup.com/Pearson/survey_math/807		
	Clarification 3: Instruction includes the use of appropriate units and labels and, where appropriate, using technology to create data	769 - 770	Problem 44	https://wgdesigngroup.com/Pearson/survey_math/769		
		783	Problem 40	https://wgdesigngroup.com/Pearson/survey_math/783		
MA.912.DP.1.2	Interpret data distributions represented in various ways. State whether the data is numerical or categorical, whether it is univariate or bivariate and interpret the different components and quantities in the display.	772	Example 2: A Frequency Distribution of Novels	https://wgdesigngroup.com/Pearson/survey_math/772		
		776	Example 7: Carry-on Luggage Weights	https://wgdesigngroup.com/Pearson/survey_math/776		
		779	Example 9: Circus Performances	https://wgdesigngroup.com/Pearson/survey_math/779		
	Clarification 1: Within the Probability and Statistics course, instruction includes the use of spreadsheets and technology.	NA	NA			
MA.912.DP.2.1	For two or more sets of numerical univariate data, calculate and compare the appropriate measures of center and measures of variability, accounting for possible effects of outliers. Interpret any notable features of the shape of the data distribution.	785	Measures of Central Tendency	https://wgdesigngroup.com/Pearson/survey_math/785		
		787	Example 6: Measures of Central Tendency	https://wgdesigngroup.com/Pearson/survey_math/787		
		797	Section 12.4: Measures of Dispersion	https://wgdesigngroup.com/Pearson/survey_math/797		
	Clarification 1: The measure of center is limited to mean and median. The measure of variation is limited to range, interquartile range, and standard deviation.	785	Definition: Mean	https://wgdesigngroup.com/Pearson/survey_math/785		
		786	Example 1: Determine the Mean	https://wgdesigngroup.com/Pearson/survey_math/786		
		798	Definition: Median,	https://wgdesigngroup.com/Pearson/survey_math/798		
			Example 2: Determine the Median	https://wgdesigngroup.com/Pearson/survey_math/		
			Standard Deviation	https://wgdesigngroup.com/Pearson/survey_math/		
	Clarification 2: Shape features include symmetry or skewness and clustering.	815	The symmetry of a normal distribution	https://wgdesigngroup.com/Pearson/survey_math/815		
	Clarification 3: Within the Probability and Statistics course, instruction includes the use of spreadsheets and technology.	NA	NA			
MA.912.DP.2.4	Fit a linear function to bivariate numerical data that suggests a linear association and interpret the slope and y-intercept of the model. Use the model to solve real-world problems in terms of the context of the data.	824	Figure 12.40	https://wgdesigngroup.com/Pearson/survey_math/824		
		825	Example 1	https://wgdesigngroup.com/Pearson/survey_math/825		
		834	Problem 38 to Problem 40 Activity 3: Baby Sizes	https://wgdesigngroup.com/Pearson/survey_math/834		
	Clarification 1: Instruction includes fitting a linear function both informally and formally with the use of technology.	831	Technology Tip	https://wgdesigngroup.com/Pearson/survey_math/831		
	Clarification 2: Problems include making a prediction or extrapolation, inside and outside the range of the data, based on the equation of the line of fit.	1063	Activity 3: Baby Sizes	https://wgdesigngroup.com/Pearson/survey_math/1063		

MA.912.DP.2.9	Fit an exponential function to bivariate numerical data that suggests an exponential association. Use the model to solve real-world problems in terms of the context of the data.	1065	Activity 4: What Will it Cost?	https://wgdesigngroup.com/Pearson/survey_math/1065	
	Clarification 1: Instruction focuses on determining whether an exponential model is appropriate by taking the logarithm of the dependent variable using spreadsheets and other technology.	831	Technology Tip	https://wgdesigngroup.com/Pearson/survey_math/831	
	Clarification 2: Instruction includes determining whether the transformed scatterplot has an appropriate line of best fit, and interpreting the y-intercept and slope of the line of best fit.	829	Example 3	https://wgdesigngroup.com/Pearson/survey_math/829	
		832	StatCrunch (available in MyLab Math and separately)	https://wgdesigngroup.com/Pearson/survey_math/832	
	Clarification 3: Problems include making a prediction or extrapolation, inside and outside the range of the data, based on the equation of the line of fit.	834	Problem 36	https://wgdesigngroup.com/Pearson/survey_math/834	
			Problem 37	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 38	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.DP.4.1	Describe events as subsets of a sample space using characteristics, or categories, of the outcomes, or as unions, intersections or complements of other events.	658	Definition: Outcomes	https://wgdesigngroup.com/Pearson/survey_math/658	
		659	Definition: Event	https://wgdesigngroup.com/Pearson/survey_math/659	
		664	Example 1	https://wgdesigngroup.com/Pearson/survey_math/664	
		665	Example 4	https://wgdesigngroup.com/Pearson/survey_math/665	
			Example 5	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.DP.4.2	Determine if events A and B are independent by calculating the product of their probabilities.	704	Probability of A and B	https://wgdesigngroup.com/Pearson/survey_math/704	
		705	Example 5	https://wgdesigngroup.com/Pearson/survey_math/705	
		706	Definition: Independent Events	https://wgdesigngroup.com/Pearson/survey_math/706	
MA.912.DP.4.3	Calculate the conditional probability of two events and interpret the result in terms of its context.	713	Definition: Conditional Probability	https://wgdesigngroup.com/Pearson/survey_math/713	
		714	Example 1: Conditional Probability	https://wgdesigngroup.com/Pearson/survey_math/714	
		715	Conditional Probability	https://wgdesigngroup.com/Pearson/survey_math/715	
			Example 3: Using the Conditional Probability Formula	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.DP.4.4	Interpret the independence of two events using conditional probability.	716	Definition: Independent Events	https://wgdesigngroup.com/Pearson/survey_math/716	
		720	Problem 75	https://wgdesigngroup.com/Pearson/survey_math/720	
			Problem 75	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.DP.4.5	Given a two-way table containing data from a population, interpret the joint and marginal relative frequencies as empirical probabilities and the conditional relative frequencies as empirical conditional probabilities. Use those probabilities to determine whether	658	Empirical Probability (Relative Frequency)	https://wgdesigngroup.com/Pearson/survey_math/658	
		660	Table 11.1	https://wgdesigngroup.com/Pearson/survey_math/660	
		661	Empirical Probability in Genetics	https://wgdesigngroup.com/Pearson/survey_math/661	
	Clarification 1: Instruction includes the connection between mathematical probability and applied statistics.	762	Probability and statistics are closely related.	https://wgdesigngroup.com/Pearson/survey_math/762	
MA.912.DP.4.6	Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.	714	Chance of Showers	https://wgdesigngroup.com/Pearson/survey_math/714	
			Example 2	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.DP.4.7	Apply the addition rule for probability, taking into consideration whether the events are mutually exclusive, and interpret the result in terms of the model and its context.	703	Definition: Mutually Exclusive	https://wgdesigngroup.com/Pearson/survey_math/703	
		706	Example 3	https://wgdesigngroup.com/Pearson/survey_math/706	
		709	Example 6	https://wgdesigngroup.com/Pearson/survey_math/709	
		711	Drawing a Card In Exercises 23–28	https://wgdesigngroup.com/Pearson/survey_math/711	
			Medical Research In Exercises 77–80	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.DP.4.8:	Apply the general multiplication rule for probability, taking into consideration whether the events are independent, and interpret the result in terms of the context.	704	And Problems	https://wgdesigngroup.com/Pearson/survey_math/704	
		705	Example 4	https://wgdesigngroup.com/Pearson/survey_math/705	
		706	The Birthday Problem	https://wgdesigngroup.com/Pearson/survey_math/706	
		711	Problem 86	https://wgdesigngroup.com/Pearson/survey_math/711	
MA.912.DP.4.9:	Apply the addition and multiplication rules for counting to solve mathematical and real-world problems, including problems	710	Exercises 73–76	https://wgdesigngroup.com/Pearson/survey_math/710	
		711	Problem 86	https://wgdesigngroup.com/Pearson/survey_math/711	
MA.912.DP.4.10:	Given a mathematical or real-world situation, calculate the appropriate permutation or combination.	732	Example 1: Permutation or Combination	https://wgdesigngroup.com/Pearson/survey_math/732	

		737	Lotteries and Probabilities	https://wgdesigngroup.com/Pearson/survey_math/737	
			Problem 41	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.F.1.6:	Compare key features of linear and nonlinear functions each represented algebraically, graphically, in tables or written descriptions.	389	Linear Functions and Their Graphs	https://wgdesigngroup.com/Pearson/survey_math/389	
		390	Example 3	https://wgdesigngroup.com/Pearson/survey_math/390	
		401	Problem 71	https://wgdesigngroup.com/Pearson/survey_math/401	
			Problem 72	https://wgdesigngroup.com/Pearson/survey_math/	
	Clarification 1: Key features are limited to domain; range; intercepts; intervals where the function is increasing, decreasing, positive or negative; end behavior and asymptotes.	388	Definition: Function	https://wgdesigngroup.com/Pearson/survey_math/388	
		389	Figure 6.41	https://wgdesigngroup.com/Pearson/survey_math/389	
		390	Figure 6.42	https://wgdesigngroup.com/Pearson/survey_math/390	
		400	Example 2: Using the Vertical Line Test	https://wgdesigngroup.com/Pearson/survey_math/400	
			Exercises 17–2	https://wgdesigngroup.com/Pearson/survey_math/	
	Clarification 2: Within the Algebra 1 course, functions other than linear, quadratic or exponential must be represented graphically.	NA	NA		
	Clarification 3: Within the Algebra 1 course, instruction includes verifying that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically.	NA	NA		
MA.912.F.1.8:	Determine whether a linear, quadratic or exponential function best models a given real-world situation.	390	Example 3	https://wgdesigngroup.com/Pearson/survey_math/390	
		390 - 391	Example 5	https://wgdesigngroup.com/Pearson/survey_math/390	
		395	Exponential Functions and Their Graphs	https://wgdesigngroup.com/Pearson/survey_math/395	
		396	Example 9	https://wgdesigngroup.com/Pearson/survey_math/396	
		398	Example 12	https://wgdesigngroup.com/Pearson/survey_math/398	
	Clarification 1: Instruction includes recognizing that linear functions model situations in which a quantity changes by a constant amount per unit interval; that quadratic functions model situations in which	398	Natural Exponential Functions	https://wgdesigngroup.com/Pearson/survey_math/398	
		399	Example 13	https://wgdesigngroup.com/Pearson/survey_math/399	
			Example 14	https://wgdesigngroup.com/Pearson/survey_math/	
	Clarification 2: Within this benchmark, the expectation is to identify the type of function from a written description or table.			https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.FL.3.1:	Compare simple, compound and continuously compounded interest over time.	606	Compound Interest	https://wgdesigngroup.com/Pearson/survey_math/606	
		607	Example 1	https://wgdesigngroup.com/Pearson/survey_math/607	
		608	Example 2	https://wgdesigngroup.com/Pearson/survey_math/608	
		610	Example 3	https://wgdesigngroup.com/Pearson/survey_math/610	
	Clarification 1: Instruction includes taking into consideration the annual percentage rate (APR) when comparing simple and compound interest.	617	Annual Percentage Rate Table for Monthly Payment Plans	https://wgdesigngroup.com/Pearson/survey_math/617	
		627	Problem 27	https://wgdesigngroup.com/Pearson/survey_math/627	
			Problem 28	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 29	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 30	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.FL.3.2:	Solve real-world problems involving simple, compound and continuously compounded interest.	604 - 605	Problem 63	https://wgdesigngroup.com/Pearson/survey_math/604	
			Problem 64	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 65	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 66	https://wgdesigngroup.com/Pearson/survey_math/	
	Clarification 1: Within the Algebra 1 course, interest is limited to simple and compound.			https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.FL.3.4:	Explain the relationship between simple interest and linear growth. Explain the relationship between compound interest and exponential growth and the relationship between continuously compounded interest and exponential growth.	595	Simple Interest Formula	https://wgdesigngroup.com/Pearson/survey_math/595	
		597	Example 4	https://wgdesigngroup.com/Pearson/survey_math/597	
		607	Compound Interest Formula	https://wgdesigngroup.com/Pearson/survey_math/607	
		613	Problem 29	https://wgdesigngroup.com/Pearson/survey_math/613	
			Problem 30	https://wgdesigngroup.com/Pearson/survey_math/	

	Clarification 1: Within the Algebra 1 course, exponential growth is limited to compound interest.			https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.GR.1.6:	Solve mathematical and real-world problems involving congruence or similarity in two-dimensional figures.	469	Congruent Figures	https://wgdesigngroup.com/Pearson/survey_math/469	
			Example 4	https://wgdesigngroup.com/Pearson/survey_math/	
	Clarification 1: Instruction includes demonstrating that two-dimensional figures are congruent or similar based on given information.	469	Problem 71	https://wgdesigngroup.com/Pearson/survey_math/469	
		474	Problem 72	https://wgdesigngroup.com/Pearson/survey_math/474	
			Problem 73	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 74	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.GR.2.4:	Determine symmetries of reflection, symmetries of rotation and symmetries of translation of a geometric figure.	501 - 514	Section 8.5: Transformational Geometry, Symmetry, and Tessellations	https://wgdesigngroup.com/Pearson/survey_math/501	
		513	Example 8	https://wgdesigngroup.com/Pearson/survey_math/513	
		516	Exercises 17–24	https://wgdesigngroup.com/Pearson/survey_math/516	
	Clarification 1: Instruction includes determining the order of each symmetry.	518	Exercises 39 and 40	https://wgdesigngroup.com/Pearson/survey_math/518	
			Problem 41	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 42	https://wgdesigngroup.com/Pearson/survey_math/	
	Clarification 2: Instruction includes the connection between tessellations of the plane and symmetries of translations.	513	Tessellations	https://wgdesigngroup.com/Pearson/survey_math/513	
		519	Problem 49	https://wgdesigngroup.com/Pearson/survey_math/519	
			Problem 50	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 51	https://wgdesigngroup.com/Pearson/survey_math/	
			Problem 52	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.GR.4.3:	Extend previous understanding of scale drawings and scale factors to determine how dilations affect the area of two-dimensional figures and the surface area or volume of three-dimensional figures.	NA	NA		
MA.912.GR.4.4:	Solve mathematical and real-world problems involving the area of two-dimensional figures.	476	Area of a Rectangle	https://wgdesigngroup.com/Pearson/survey_math/476	
		477	Area of a Parallelogram	https://wgdesigngroup.com/Pearson/survey_math/477	
			Area of a Triangle	https://wgdesigngroup.com/Pearson/survey_math/	
		478	Example 1	https://wgdesigngroup.com/Pearson/survey_math/478	
		481	Example 5	https://wgdesigngroup.com/Pearson/survey_math/481	
	Clarification 1: Instruction includes concepts of population density based on area.	NA	NA		
MA.912.GR.4.5:	Solve mathematical and real-world problems involving the volume of three-dimensional figures limited to cylinders, pyramids, prisms, cones and spheres.	488	Cylinder	https://wgdesigngroup.com/Pearson/survey_math/488	
			Volume and Surface Area of a Cylinder	https://wgdesigngroup.com/Pearson/survey_math/	
		489	Cone	https://wgdesigngroup.com/Pearson/survey_math/489	
		489	Sphere	https://wgdesigngroup.com/Pearson/survey_math/489	
		499	Problem 45	https://wgdesigngroup.com/Pearson/survey_math/499	
			Problem 46	https://wgdesigngroup.com/Pearson/survey_math/	
		500	Problem 59	https://wgdesigngroup.com/Pearson/survey_math/500	
	Clarification 1: Instruction includes concepts of density based on volume.			https://wgdesigngroup.com/Pearson/survey_math/	
	Clarification 2: Instruction includes using Cavalieri's Principle to give informal arguments about the formulas for the volumes of right and non-right cylinders, pyramids, prisms and cones.	488 - 495	Section 8.4: Volume and Surface Area	https://wgdesigngroup.com/Pearson/survey_math/488	
MA.912.GR.4.6:	Solve mathematical and real-world problems involving the surface area of three-dimensional figures limited to cylinders, pyramids, prisms, cones and spheres.	488	Surface Area of a Cylinder	https://wgdesigngroup.com/Pearson/survey_math/488	
		489	Surface Area of a Cone	https://wgdesigngroup.com/Pearson/survey_math/489	
			Surface Area of a Sphere	https://wgdesigngroup.com/Pearson/survey_math/	
		490	Example 1	https://wgdesigngroup.com/Pearson/survey_math/490	
		492	Example 4	https://wgdesigngroup.com/Pearson/survey_math/492	

		499	Problem 50	https://wgdesigngroup.com/Pearson/survey_math/499	
MA.912.LT.4.1:	Translate propositional statements into logical arguments using propositional variables and logical connectives.	104	Table 3.1 - Logical Connectives	https://wgdesigngroup.com/Pearson/survey_math/104	
		146	To Determine Whether An Argument is Valid	https://wgdesigngroup.com/Pearson/survey_math/146	
		153	Exercises 59–64	https://wgdesigngroup.com/Pearson/survey_math/153	
MA.912.LT.4.2:	Determine truth values of simple and compound statements using truth tables.	110	Constructing Truth Tables for Statements Involving Negations, Conjunctions, and Disjunctions	https://wgdesigngroup.com/Pearson/survey_math/110	
		111	Example 1	https://wgdesigngroup.com/Pearson/survey_math/111	
			Example 2	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.LT.4.3:	Identify and accurately interpret “if…then,” “if and only if,” “all” and “not” statements. Find the converse, inverse and contrapositive of a	100	Compound Statements	https://wgdesigngroup.com/Pearson/survey_math/100	
		169	Exercises 40–44	https://wgdesigngroup.com/Pearson/survey_math/169	
	Clarification 1: Instruction focuses on recognizing the relationships between an “if…then” statement and the converse, inverse and	139	Example 12	https://wgdesigngroup.com/Pearson/survey_math/139	
		142	Exercise 49	https://wgdesigngroup.com/Pearson/survey_math/142	
	Clarification 2: Within the Geometry course, instruction focuses on the connection to proofs within the course.			https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.LT.4.4:	Represent logic operations, such as AND, OR, NOT, NOR, and XOR, using logical symbolism to solve problems.	160 -161	Using Symbolic Statements to Represent Switching Circuits	https://wgdesigngroup.com/Pearson/survey_math/160	
		162	Example 1	https://wgdesigngroup.com/Pearson/survey_math/162	
		164	Applications of Logic	https://wgdesigngroup.com/Pearson/survey_math/164	
MA.912.LT.4.5:	Determine whether two propositions are logically equivalent.	132	Equivalent Statements	https://wgdesigngroup.com/Pearson/survey_math/132	
		133	Example 2	https://wgdesigngroup.com/Pearson/survey_math/133	
			Example 3	https://wgdesigngroup.com/Pearson/survey_math/	
		141	Exercise 15	https://wgdesigngroup.com/Pearson/survey_math/141	
MA.912.LT.4.9:	Construct logical arguments using laws of detachment, syllogism, tautology, contradiction and Euler Diagrams.	154 - 158	Section 3.6: Euler Diagrams and Syllogistic Arguments	https://wgdesigngroup.com/Pearson/survey_math/154	
		159	Problem 31	https://wgdesigngroup.com/Pearson/survey_math/159	
MA.912.LT.4.10:	Judge the validity of arguments and give counterexamples to disprove statements.	145	Determine the Validity of Arguments	https://wgdesigngroup.com/Pearson/survey_math/145	
			Definition: Valid and Invalid Arguments	https://wgdesigngroup.com/Pearson/survey_math/	
		146	Example 1	https://wgdesigngroup.com/Pearson/survey_math/146	
		147 -148	Example 3	https://wgdesigngroup.com/Pearson/survey_math/147	
	Clarification 1: Within the Geometry course, instruction focuses on the connection to proofs within the course.			https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.LT.5.1:	Given two sets, determine whether the two sets are equivalent and whether one set is a subset of another. Given one set, determine its power set.	52	Subsets	https://wgdesigngroup.com/Pearson/survey_math/52	
		52- 53	Example 1	https://wgdesigngroup.com/Pearson/survey_math/52	
		56	Example 5	https://wgdesigngroup.com/Pearson/survey_math/56	
MA.912.LT.5.4:	Perform the set operations of taking the complement of a set and the union, intersection, difference and product of two sets.	59	Example 1	https://wgdesigngroup.com/Pearson/survey_math/59	
		60	Example 2	https://wgdesigngroup.com/Pearson/survey_math/60	
		61	Example 4	https://wgdesigngroup.com/Pearson/survey_math/61	
		62	Union	https://wgdesigngroup.com/Pearson/survey_math/62	
		66	Difference of Two Sets	https://wgdesigngroup.com/Pearson/survey_math/66	
		67	Cartesian Product	https://wgdesigngroup.com/Pearson/survey_math/67	
	Clarification 1: Instruction includes the connection to probability and the words AND, OR and NOT.	64	The Meaning of and and or	https://wgdesigngroup.com/Pearson/survey_math/64	
MA.912.LT.5.5:	Explore relationships and patterns and make arguments about relationships between sets using Venn Diagrams.	154 - 155	Section 3.6: Euler Diagrams and Syllogistic Arguments	https://wgdesigngroup.com/Pearson/survey_math/154	
		156	Example 2	https://wgdesigngroup.com/Pearson/survey_math/156	
MA.912.LT.5.6:	Prove set relations, including DeMorgan’s Laws and equivalence	134	De Morgan’s Laws for Logic	https://wgdesigngroup.com/Pearson/survey_math/134	

	relations.	135	Example 4	https://wgdesigngroup.com/Pearson/survey_math/135	
			Exercise 17	https://wgdesigngroup.com/Pearson/survey_math/	
MA.912.T.1.2:	Solve mathematical and real-world problems involving right triangles using trigonometric ratios and the Pythagorean Theorem.	1075	Activity 9: From Base to Branch	https://wgdesigngroup.com/Pearson/survey_math/1075	
	Clarification 1: Instruction includes procedural fluency with the relationships of side lengths in special right triangles having angle measures of 30°-60°-90° and 45°-45°-90°.				
MA.K12.MTR.1.1:	Actively participate in effortful learning both individually and collectively.	1059	Activity 1: What a Workout (SE)	https://wgdesigngroup.com/Pearson/survey_math/1059	
		1061	Activity 2: Too Many Emails (SE)		
		1063	Activity 3: Baby Sizes (SE)		
		1065	Activity 4: What Will it Cost? (SE)		
		1067	Activity 5: Algorithmically Superior (SE)		
		1069	Activity 6: Frequent Fliers (SE)		
		1071	Activity 7: Fields of Functions (SE)		
		1073	Activity 8: Swell Sports (SE)		
		1075	Activity 9: From Base to Branch (SE)		
	Mathematicians who participate in effortful learning both individually and with others:			https://wgdesigngroup.com/Pearson/survey_math/	
	Analyze the problem in a way that makes sense given the task.	680		https://wgdesigngroup.com/Pearson/survey_math/680	
		1059	Activity 1: What a Workout (SE)	https://wgdesigngroup.com/Pearson/survey_math/1059	
		1061	Activity 2: Too Many Emails (SE)		
		1063	Activity 3: Baby Sizes (SE)		
		1065	Activity 4: What Will it Cost? (SE)		
		1067	Activity 5: Algorithmically Superior (SE)		
		1069	Activity 6: Frequent Fliers (SE)		
		1071	Activity 7: Fields of Functions (SE)		
		1073	Activity 8: Swell Sports (SE)		
		1075	Activity 9: From Base to Branch (SE)		
	Ask questions that will help with solving the task.	25	Decisions, Decisions	https://wgdesigngroup.com/Pearson/survey_math/25	
		1059	Activity 1: What a Workout (SE)	https://wgdesigngroup.com/Pearson/survey_math/1059	
		1061	Activity 2: Too Many Emails (SE)		
		1063	Activity 3: Baby Sizes (SE)		
		1065	Activity 4: What Will it Cost? (SE)		
		1067	Activity 5: Algorithmically Superior (SE)		
		1069	Activity 6: Frequent Fliers (SE)		
		1071	Activity 7: Fields of Functions (SE)		
		1073	Activity 8: Swell Sports (SE)		
		1075	Activity 9: From Base to Branch (SE)		
	Build perseverance by modifying methods as needed while solving a challenging task.	312	Challenge Problem/Group Activity	https://wgdesigngroup.com/Pearson/survey_math/312	
		321	Challenge Problems/Group Activities		
		1059	Activity 1: What a Workout (SE)	https://wgdesigngroup.com/Pearson/survey_math/1059	
		1061	Activity 2: Too Many Emails (SE)		
		1063	Activity 3: Baby Sizes (SE)		
		1065	Activity 4: What Will it Cost? (SE)		
		1067	Activity 5: Algorithmically Superior (SE)		
		1069	Activity 6: Frequent Fliers (SE)		
		1071	Activity 7: Fields of Functions (SE)		
		1073	Activity 8: Swell Sports (SE)		
		1075	Activity 9: From Base to Branch (SE)		
	Stay engaged and maintain a positive mindset when working to solve	1059	Activity 1: What a Workout (SE)	https://wgdesigngroup.com/Pearson/survey_math/1059	

tasks.	1061	Activity 2: Too Many Emails (SE)				
	1063	Activity 3: Baby Sizes (SE)				
	1065	Activity 4: What Will it Cost? (SE)				
	1067	Activity 5: Algorithmically Superior (SE)				
	1069	Activity 6: Frequent Fliers (SE)				
	1071	Activity 7: Fields of Functions (SE)				
	1073	Activity 8: Swell Sports (SE)				
	1075	Activity 9: From Base to Branch (SE)				
Help and support each other when attempting a new method or approach.	533	Problem Solving/Group Activity	https://wgdesigngroup.com/Pearson/survey_math/533			
	1059	Activity 1: What a Workout (SE)	https://wgdesigngroup.com/Pearson/survey_math/1059			
	1061	Activity 2: Too Many Emails (SE)				
	1063	Activity 3: Baby Sizes (SE)				
	1065	Activity 4: What Will it Cost? (SE)				
	1067	Activity 5: Algorithmically Superior (SE)				
	1069	Activity 6: Frequent Fliers (SE)				
	1071	Activity 7: Fields of Functions (SE)				
	1073	Activity 8: Swell Sports (SE)				
	1075	Activity 9: From Base to Branch (SE)				
Clarifications:						
Teachers who encourage students to participate actively in effortful learning both individually and with others:						
Cultivate a community of growth mindset learners.	1079	Activity 1: What a Workout (TE)				
	1080	Activity 2: Too Many Emails (TE)				
	1081	Activity 3: Baby Sizes (TE)				
	1082	Activity 4: What Will it Cost? (TE)				
	1083	Activity 5: Algorithmically Superior (TE)				
	1084	Activity 6: Frequent Fliers (TE)				
	1085	Activity 7: Fields of Functions (TE)				
	1086	Activity 8: Swell Sports (TE)				
	1087	Activity 9: From Base to Branch (TE)				
Foster perseverance in students by choosing tasks that are challenging.	1079	Activity 1: What a Workout (TE)				
	1080	Activity 2: Too Many Emails (TE)				
	1081	Activity 3: Baby Sizes (TE)				
	1082	Activity 4: What Will it Cost? (TE)				
	1083	Activity 5: Algorithmically Superior (TE)				
	1084	Activity 6: Frequent Fliers (TE)				
	1085	Activity 7: Fields of Functions (TE)				
	1086	Activity 8: Swell Sports (TE)				
	1087	Activity 9: From Base to Branch (TE)				
Develop students' ability to analyze and problem solve.	1079	Activity 1: What a Workout (TE)				
	1080	Activity 2: Too Many Emails (TE)				
	1081	Activity 3: Baby Sizes (TE)				
	1082	Activity 4: What Will it Cost? (TE)				
	1083	Activity 5: Algorithmically Superior (TE)				
	1084	Activity 6: Frequent Fliers (TE)				
	1085	Activity 7: Fields of Functions (TE)				
	1086	Activity 8: Swell Sports (TE)				
	1087	Activity 9: From Base to Branch (TE)				
Recognize students' effort when solving challenging problems.	1079	Activity 1: What a Workout (TE)				
	1080	Activity 2: Too Many Emails (TE)				

		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
MA.K12.MTR.2.1:	Demonstrate understanding by representing problems in multiple ways.	842	Represent problems using graphs.	https://wgdesigngroup.com/Pearson/survey_math/842		
		1059	Activity 1: What a Workout (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Mathematicians who demonstrate understanding by representing problems in multiple ways:					
	Build understanding through modeling and using manipulatives.	295	Why This Is Important	https://wgdesigngroup.com/Pearson/survey_math/295		
		1059	Activity 1: What a Workout (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Represent solutions to problems in multiple ways using objects, drawings, tables, graphs and equations.	842	Graphs	https://wgdesigngroup.com/Pearson/survey_math/842		
		846	Graph Theory Representations			
		1059	Activity 1: What a Workout (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Progress from modeling problems with objects and drawings to using algorithms and equations.	871		https://wgdesigngroup.com/Pearson/survey_math/871		
		1059	Activity 1: What a Workout (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Express connections between concepts and representations.	58	Section 2.3	https://wgdesigngroup.com/Pearson/survey_math/58		
		1059	Activity 1: What a Workout (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Choose a representation based on the given context or purpose.	928	Why This Is Important	https://wgdesigngroup.com/Pearson/survey_math/928		
		1059	Activity 1: What a Workout (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Clarifications:					
	Teachers who encourage students to demonstrate understanding by representing problems in multiple ways:					
	Help students make connections between concepts and representations.	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
	Provide opportunities for students to use manipulatives when investigating concepts.	1079	Activity 1: What a Workout (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
	Guide students from concrete to pictorial to abstract representations as understanding progresses.	1079	Activity 1: What a Workout (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
	Show students that various representations can have different	1079	Activity 1: What a Workout (TE)			

	purposes and can be useful in different situations.	1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
MA.K12.MTR.3.1:	Complete tasks with mathematical fluency.	308	Examples 4 through 6 show how to do	https://wgdesigngroup.com/Pearson/survey_math/308		
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Mathematicians who complete tasks with mathematical fluency:					
	Select efficient and appropriate methods for solving problems within the given context.	308	Examples 4 through 6 show how to do	https://wgdesigngroup.com/Pearson/survey_math/308		
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Maintain flexibility and accuracy while performing procedures and mental calculations.	308	Examples 4 through 6 show how to do	https://wgdesigngroup.com/Pearson/survey_math/308		
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Complete tasks accurately and with confidence.	308	Examples 4 through 6 show how to do	https://wgdesigngroup.com/Pearson/survey_math/308		
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Adapt procedures to apply them to a new context.	20	Section 1.3: Problem-Solving Proced	https://wgdesigngroup.com/Pearson/survey_math/20		
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Use feedback to improve efficiency when performing calculations.	274	Problem 70	https://wgdesigngroup.com/Pearson/survey_math/274		
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Clarifications:					
	Teachers who encourage students to complete tasks with mathematical fluency:					
	Provide students with the flexibility to solve problems by selecting a procedure that allows them to solve efficiently and accurately.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			

	Offer multiple opportunities for students to practice efficient and generalizable methods.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Provide opportunities for students to reflect on the method they used and determine if a more efficient method could have been used.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
MA.K12.MTR.4.1:	Engage in discussions that reflect on the mathematical thinking of self and others.	475	Problem 84	https://wgdesigngroup.com/Pearson/survey_math/475		
		1059	Activity 1: What a Workout (SE)			
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
	Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others:					
	Communicate mathematical ideas, vocabulary and methods effectively.	97	History	https://wgdesigngroup.com/Pearson/survey_math/97		
		1061	Activity 2: Too Many Emails (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Analyze the mathematical thinking of others.	691	A tree diagram to help us analyze the	https://wgdesigngroup.com/Pearson/survey_math/691		
		1061	Activity 2: Too Many Emails (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Compare the efficiency of a method to those expressed by others.	1061	Activity 2: Too Many Emails (SE)	https://wgdesigngroup.com/Pearson/survey_math/1061		
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Recognize errors and suggest how to correctly solve the task.	771	Recreational Math	https://wgdesigngroup.com/Pearson/survey_math/771		
		1061	Activity 2: Too Many Emails (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1073	Activity 8: Swell Sports (SE)			

		1075	Activity 9: From Base to Branch (SE)			
	Justify results by explaining methods and processes.	580	Problem 66	https://wgdesigngroup.com/Pearson/survey_math/580		
		1061	Activity 2: Too Many Emails (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Construct possible arguments based on evidence.	673	Did You Know?	https://wgdesigngroup.com/Pearson/survey_math/673		
		1061	Activity 2: Too Many Emails (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Clarifications:					
	Teachers who encourage students to engage in discussions that reflect on the mathematical thinking of self and others:					
	Establish a culture in which students ask questions of the teacher and their peers, and error is an opportunity for learning.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Create opportunities for students to discuss their thinking with peers.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Select, sequence and present student work to advance and deepen understanding of correct and increasingly efficient methods.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Develop students' ability to justify methods and compare their responses to the responses of their peers.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
MA.K12.MTR.5.1:	Use patterns and structure to help understand and connect mathematical concepts.	22	Devise a plan to solve the problem.	https://wgdesigngroup.com/Pearson/survey_math/22		
		1063	Activity 3: Baby Sizes (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			

	1071	Activity 7: Fields of Functions (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Mathematicians who use patterns and structure to help understand and connect mathematical concepts:					
Focus on relevant details within a problem.	642	Focus primarily on two basic types of	https://wgdesigngroup.com/Pearson/survey_math/642		
	1063	Activity 3: Baby Sizes (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Create plans and procedures to logically order events, steps or ideas to solve problems.	189	The hexadecimal numeration system	https://wgdesigngroup.com/Pearson/survey_math/189		
	1063	Activity 3: Baby Sizes (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Decompose a complex problem into manageable parts.	870	Profile in Mathematics	https://wgdesigngroup.com/Pearson/survey_math/870		
	1063	Activity 3: Baby Sizes (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Relate previously learned concepts to new concepts.	177	Timely Tip	https://wgdesigngroup.com/Pearson/survey_math/177		
	1063	Activity 3: Baby Sizes (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Look for similarities among problems.	571	Mathematics Today	https://wgdesigngroup.com/Pearson/survey_math/571		
	1063	Activity 3: Baby Sizes (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Connect solutions of problems to more complicated large-scale situations.	804	Problem 28	https://wgdesigngroup.com/Pearson/survey_math/804		
	1063	Activity 3: Baby Sizes (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Clarifications:					
Teachers who encourage students to use patterns and structure to help understand and connect mathematical concepts:					
Help students recognize the patterns in the world around them and connect these patterns to mathematical concepts.	1081	Activity 3: Baby Sizes (TE)			
	1083	Activity 5: Algorithmically Superior (TE)			
	1084	Activity 6: Frequent Fliers (TE)			
	1085	Activity 7: Fields of Functions (TE)			
	1087	Activity 9: From Base to Branch (TE)			
Support students to develop generalizations based on the similarities found among problems.	1081	Activity 3: Baby Sizes (TE)			
	1083	Activity 5: Algorithmically Superior (TE)			
	1084	Activity 6: Frequent Fliers (TE)			

		1085	Activity 7: Fields of Functions (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Provide opportunities for students to create plans and procedures to solve problems.	1081	Activity 3: Baby Sizes (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Develop students' ability to construct relationships between their current understanding and more sophisticated ways of thinking.	1081	Activity 3: Baby Sizes (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1087	Activity 9: From Base to Branch (TE)			
MA.K12.MTR.6.1:	Assess the reasonableness of solutions.	590	Other Percent Problems	https://wgdesigngroup.com/Pearson/survey_math/590		
		1059	Activity 1: What a Workout (SE)			
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Mathematicians who assess the reasonableness of solutions:					
	Estimate to discover possible solutions.	36	Problem 21Activity 1: What a Workou	https://wgdesigngroup.com/Pearson/survey_math/36		
		1059	Activity 1: What a Workout (SE)			
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Check calculations when solving problems.	644	Scientific Calculator	https://wgdesigngroup.com/Pearson/survey_math/644		
		646	Example 2			
		1059	Activity 1: What a Workout (SE)			
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Verify possible solutions by explaining the methods used.	557	Verify g, h Activity 1: What a Workout/	https://wgdesigngroup.com/Pearson/survey_math/557		
		1059	Activity 1: What a Workout (SE)			
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Evaluate results based on the given context.	149	EvaluateActivity 1: What a WorkoutAc	https://wgdesigngroup.com/Pearson/survey_math/149		
		1059	Activity 1: What a Workout (SE)			

		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Clarifications:					
	Teachers who encourage students to assess the reasonableness of solutions:					
	Have students estimate or predict solutions prior to solving.	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Prompt students to continually ask, “Does this solution make sense? How do you know?”	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Reinforce that students check their work as they progress within and after a task.	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Strengthen students’ ability to verify solutions through justifications.	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
MA.K12.MTR.7.1:	Apply mathematics to real-world contexts.	836	Problem 47-48	https://wgdesigngroup.com/Pearson/survey_math/836		
		951	Exercises 11–14			
		1059	Activity 1: What a Workout (SE)			
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			

	1071	Activity 7: Fields of Functions (SE)			
	1073	Activity 8: Swell Sports (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Mathematicians who apply mathematics to real-world contexts:					
Connect mathematical concepts to everyday experiences.	172	Why This Is Important	https://wgdesigngroup.com/Pearson/survey_math/172		
	173	The Rhind Papyrus			
	1059	Activity 1: What a Workout (SE)			
	1061	Activity 2: Too Many Emails (SE)			
	1063	Activity 3: Baby Sizes (SE)			
	1065	Activity 4: What Will it Cost? (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1073	Activity 8: Swell Sports (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Use models and methods to understand, represent and solve problems.	360	Did You Know?	https://wgdesigngroup.com/Pearson/survey_math/360		
	1059	Activity 1: What a Workout (SE)			
	1061	Activity 2: Too Many Emails (SE)			
	1063	Activity 3: Baby Sizes (SE)			
	1065	Activity 4: What Will it Cost? (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1073	Activity 8: Swell Sports (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Perform investigations to gather data or determine if a method is appropriate.	453	Euclid	https://wgdesigngroup.com/Pearson/survey_math/453		
	1059	Activity 1: What a Workout (SE)			
	1061	Activity 2: Too Many Emails (SE)			
	1063	Activity 3: Baby Sizes (SE)			
	1065	Activity 4: What Will it Cost? (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1073	Activity 8: Swell Sports (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Redesign models and methods to improve accuracy or efficiency.	314	Examples 1 through 4	https://wgdesigngroup.com/Pearson/survey_math/314		
	1059	Activity 1: What a Workout (SE)			
	1061	Activity 2: Too Many Emails (SE)			
	1063	Activity 3: Baby Sizes (SE)			
	1065	Activity 4: What Will it Cost? (SE)			
	1067	Activity 5: Algorithmically Superior (SE)			
	1069	Activity 6: Frequent Fliers (SE)			
	1071	Activity 7: Fields of Functions (SE)			
	1073	Activity 8: Swell Sports (SE)			
	1075	Activity 9: From Base to Branch (SE)			
Clarifications:					
Teachers who encourage students to apply mathematics to real-world contexts:					
Provide opportunities for students to create models, both concrete	1079	Activity 1: What a Workout (TE)			

	and abstract, and perform investigations.	1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Challenge students to question the accuracy of their models and methods.	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Support students as they validate conclusions by comparing them to the given situation.	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
	Indicate how various concepts can be applied to other disciplines.	1079	Activity 1: What a Workout (TE)			
		1080	Activity 2: Too Many Emails (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1085	Activity 7: Fields of Functions (TE)			
		1086	Activity 8: Swell Sports (TE)			
		1087	Activity 9: From Base to Branch (TE)			
ELA.K12.EE.1.1:	Cite evidence to explain and justify reasoning.	533	Practice the Skills	https://wgdesigngroup.com/Pearson/survey_math/533		
		1059	Activity 1: What a Workout (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1075	Activity 9: From Base to Branch (SE)			
	Clarifications:					
	K-1 Students include textual evidence in their oral communication with guidance and support from adults. The evidence can consist of details from the text without naming the text. During 1st grade, students learn how to incorporate the evidence in their writing.					

	2-3 Students include relevant textual evidence in their written and oral communication. Students should name the text when they refer to it. In 3rd grade, students should use a combination of direct and indirect citations.					
	4-5 Students continue with previous skills and reference comments made by speakers and peers. Students cite texts that they've directly quoted, paraphrased, or used for information. When writing, students will use the form of citation dictated by the instructor or the style guide referenced by the instructor.					
	6-8 Students continue with previous skills and use a style guide to create a proper citation.					
	9-12 Students continue with previous skills and should be aware of existing style guides and the ways in which they differ.	533	Practice the Skills	https://wgdesigngroup.com/Pearson/survey_math/533		
		1079	Activity 1: What a Workout (TE)			
		1081	Activity 3: Baby Sizes (TE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1087	Activity 9: From Base to Branch (TE)			
ELA.K12.EE.2.1:	Read and comprehend grade-level complex texts proficiently.	179	Problem 5	https://wgdesigngroup.com/Pearson/survey_math/179		
		527	Upson's short story			
		1061	Activity 2: Too Many Emails (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Clarifications:					
	See Text Complexity for grade-level complexity bands and a text complexity rubric.		Lexile Level 1010L-1200L			
ELA.K12.EE.3.1:	Make inferences to support comprehension.	133	Recreational Math	https://wgdesigngroup.com/Pearson/survey_math/133		
		1061	Activity 2: Too Many Emails (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
	Clarifications:					
	Students will make inferences before the words infer or inference are introduced.					
	Kindergarten students will answer questions like "Why is the girl smiling?" or make predictions about what will happen based on the title page. Students will use the terms and apply them in 2nd grade and beyond.					
ELA.K12.EE.4.1:	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.	475	Problem 84	https://wgdesigngroup.com/Pearson/survey_math/475		
		1059	Activity 1: What a Workout (SE)			
		1079	Activity 1: What a Workout (TE)			
		1063	Activity 3: Baby Sizes (SE)			
		1081	Activity 3: Baby Sizes (TE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1084	Activity 6: Frequent Fliers (TE)			

		1071	Activity 7: Fields of Functions (SE)			
		1085	Activity 7: Fields of Functions (TE)			
		1073	Activity 8: Swell Sports (SE)			
		1086	Activity 8: Swell Sports (TE)			
		1075	Activity 9: From Base to Branch (SE)			
		1087	Activity 9: From Base to Branch (TE)			
	Clarifications:					
	In kindergarten, students learn to listen to one another respectfully.					
	In grades 1-2, students build upon these skills by justifying what they are thinking. For example: “I think _____ because _____.” The collaborative conversations are becoming academic conversations.					
	In grades 3-12, students engage in academic conversations discussing claims and justifying their reasoning, refining and applying skills. Students build on ideas, propel the conversation, and support claims and counterclaims with evidence.					
ELA.K12.EE.5.1:	Use the accepted rules governing a specific format to create quality work.	772	Rules for Data Grouped by Classes	https://wgdesigngroup.com/Pearson/survey_math/772		
		1061	Activity 2: Too Many Emails (SE)			
		1080	Activity 2: Too Many Emails (TE)			
		1063	Activity 3: Baby Sizes (SE)			
		1081	Activity 3: Baby Sizes (TE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1075	Activity 9: From Base to Branch (SE)			
		1087	Activity 9: From Base to Branch (TE)			
	A 3rd grade student creating a poster board display must have instruction in how to effectively present information to do quality work.					
ELA.K12.EE.6.1:	Use appropriate voice and tone when speaking or writing.	534	Concept/Writing Exercises	https://wgdesigngroup.com/Pearson/survey_math/534		
		1059	Activity 1: What a Workout (SE)			
		1079	Activity 1: What a Workout (TE)			
		1061	Activity 2: Too Many Emails (SE)			
		1080	Activity 2: Too Many Emails (TE)			
		1063	Activity 3: Baby Sizes (SE)			
		1081	Activity 3: Baby Sizes (TE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1082	Activity 4: What Will it Cost? (TE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1083	Activity 5: Algorithmically Superior (TE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1084	Activity 6: Frequent Fliers (TE)			
		1071	Activity 7: Fields of Functions (SE)			
		1085	Activity 7: Fields of Functions (TE)			
		1073	Activity 8: Swell Sports (SE)			
		1086	Activity 8: Swell Sports (TE)			
		1075	Activity 9: From Base to Branch (SE)			

		1087	Activity 9: From Base to Branch (TE)			
	Clarifications:					
	In kindergarten and 1st grade, students learn the difference between formal and informal language. For example, the way we talk to our friends differs from the way we speak to adults. In 2nd grade and beyond, students practice appropriate social and academic language to discuss texts.					
ELD.K12.ELL.MA.1:	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Mathematics.	212	Why This Is Important	https://wgdesigngroup.com/Pearson/survey_math/212		
		1059	Activity 1: What a Workout (SE)			
		1063	Activity 3: Baby Sizes (SE)			
		1065	Activity 4: What Will it Cost? (SE)			
		1067	Activity 5: Algorithmically Superior (SE)			
		1069	Activity 6: Frequent Fliers (SE)			
		1071	Activity 7: Fields of Functions (SE)			
		1073	Activity 8: Swell Sports (SE)			
		1075	Activity 9: From Base to Branch (SE)			