Algebra 1 - 2013-2014

Unit 1&2 - Intro and Linear Relationships

Standards	Approaching Standards	Meeting Standards	Above Standards	Comments
Domain and Range	I know how to write the domain of a horizontal segment and the range of a vertical segment.	Given any graph, I can tell you the domain and range of the graph.	Given a domain and range, I can graph a possible function.	Quiz 1
Functions	Given an input and a function machine, I can find the output	I can evaluate functions using the proper notations. I can tell the difference between functions and non-functions given a graph or a table.	Given an output and a function machine, I can find the input. I can create an example of a graph of a function and a non-function.	Quiz 1
Slope and Rate of Change	I can tell the difference between increasing, decreasing, zero slope, and no slope Given several lines on the same coordinate plane, I know which lines has the greatest rate of change	I can calculate the slope given a line	I know the meaning of slope in context and I can find the slope in a word problem	Quiz 2
Graphing a Line	I can graph a line given a table of values. Given a graph, I can find the x-intercept.	I can graph a line given an equation of a line. I can find the x- and y-intercept of a given line.	Given a word problem or a tile pattern, I can graph a line and interpret the meaning of the x-intercept.	Quiz 2
Writing an Equation in Slope-Intercept Form	Given an equation in slope-intercept form, I know which is the slope and which is the y-intercept. I can write an equation in slope-intercept form given a slope and intercept	Given a graph or two points on a line, I can write an equation in slope-intercept form.	Given a word problem, I can write an equation and interpret the slope and the y-intercept in context.	Quiz 2
Multiple Representations	Given a story, I can create a table of values.	Given a story, I can create a table, a graph, and an equations	I can create a story that would best represent a given table, graph, or equation.	Quiz 1

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Unit 1&2 - Sample Questions

Standards	Approaching Standards	Meeting Standards	Above Standards	Comments
Domain and Range	Possible Matching Question involving various graphs and their domain and range	Use your graphing calculator to graph $y = -\sqrt{x+3} - 4$, and describe the domain and range in words and in algebraic notation.	Create a possible graph where domain is $x \ge 3$ and range is $y \le 2$	Quiz 1
Functions	Find the output for the following function: $x = -3$ $f(x) = -2x + 4$ $f(x) = ?$	Given $f(x) = x^2 - 4$, find $f(3)$ and $f(-1)$. Determine whether or not the following graph is a function. Explain.	Find the input for the following function: $x = ?$ $f(x) = 3 - \sqrt{x}$ Create an example of a graph of a function and a non-function.	Quiz 1
Slope and Rate of Change	Possible Matching Question for lines with no slope, zero slope, positive slope, or negative slope. Given the following lines, rank them in order of the smallest slopes to the greatest slope. Explain.	Given the following two points on a line, calculate the slope of the line: (3,5) and (-1,7)	It has been a very productive day for SpongeBob and Patrick! In three minutes, they caught eight jellyfish. In ten minutes, they caught twenty-nine jellyfish. If we were to graph this situation and assume that it is a linear graph, what would the slope of the line represent?	Quiz 2
Graphing a Line	Possible Matching Question for a table, its graph, and its x-intercept.	Graph $y = 3x - 2$ and find its x- and y-intercept.	Explain your reasoning. For winning the Student Council activity, Alfred won a \$30 Subway Voucher. Each day he buys a sub that costs \$6. Graph this situation and explain the meaning of the x-intercept.	Quiz 2
Writing an Equation in Slope-Intercept Form	Possible Matching Question for an equation, its slope, and its y-int. Write an equation of a line that has a slope of $\frac{1}{2}$ and a y-int of $(0, -3)$.	Write an equation of a line that goes through these two points. (3,5) and (-1,7)	It has been a very productive day for SpongeBob and Patrick! In three minutes, they caught eight jellyfish. In ten minutes, they caught twenty-nine jellyfish. Graph this situation and interpret the meaning of the y-intercept.	Quiz 2
Multiple Representations	Create a table of values for the following story: For winning the Student Council activity, Alfred won a \$30 Subway Voucher. Each day he buys a sub that costs \$6.	Create a table, a graph, and an equation for the following story: For winning the Student Council activity, Alfred won a \$30 Subway Voucher. Each day he buys a sub that costs \$6.	Create a possible story that would best represent the following equation and its graph: $y = -2x + 7$	Quiz 1