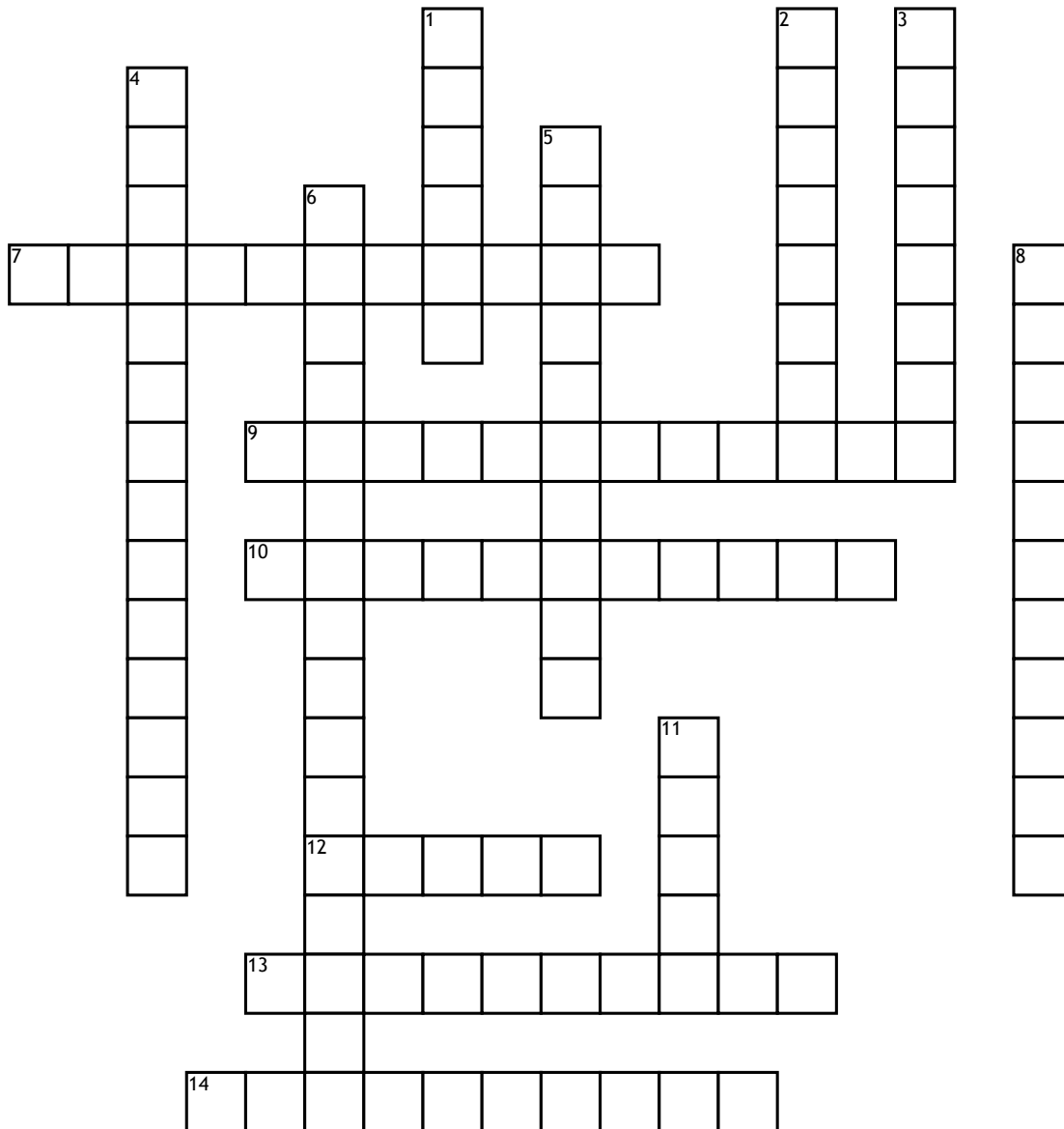


Linear Functions



Across

7. A number multiplied by a variable in an algebraic expression.
9. the relationship between two quantities that are changing, this is also slope
10. A pair of numbers that give the location of a point on a x and y grid. for example graph (3, 2)
12. A measure of the steepness of a line. Given two points with coordinates (X1,Y1) and (x2,y2) on a line the slope, m, of the line is given $m = \text{rise/run} = \frac{y_2 - y_1}{x_2 - x_1}$
13. x coordinate of a point where a graph crosses the x axis/ y coordinate of this point is zero
14. the y-coordinate of a point where a graph crosses the y-axis

Down

1. All of the input or x values in a function
2. A relationship from one set (called the domain) to another set (called the range) that assigns to each element of the domain exactly one element of the range.
3. A letter used to represent one or more numbers
4. A function in the form $f(x) = mx + b$
5. A straight line that best represents all data points of a scatter plot. This line may pass through some, all, or none of the points displayed by the scatter plot. Also referred to as a Trend Line or Regression Line.
6. attempts to model the relationship between two variables by fitting a linear equation to observed data. One variable is considered to be an explanatory variable, and the other is considered to be a dependent variable.
8. A graphed cluster of dots, each of which represents the values of two variables. The slope of the points suggests the direction of the relationship between the two variables. The amount of scatter suggests the strength of the correlation
11. Distance between highest and lowest scores in a set of data.