## VOCABULARY

| abscissa | the first number (or $x$ value) of an ordered pair |
| :---: | :---: |
| absolute value | the distance that a number is from zero on the number line; always positive |
| arithmetic sequence | a sequence in which a fixed amount is added on to get the next term |
| causation | when one event causes another. |
| common difference | the fixed amount added on to get to the next term in an arithmetic sequence |
| constant of variation | the value of $k$ in a direct variation $\mathrm{y}=\mathrm{kx}$ |
| coordinate plane | a way of locating points in a plane that consists of a horizontal and a vertical number line intersecting at the zeros |
| coordinates | an ordered pair, ( $\mathrm{x}, \mathrm{y}$ ), that describes the location of a point in the coordinate plane |
| correlation | when one event can be used to predict another. |
| correlation coefficient | how strong or weak the correlation is between two events. |
| dependent variable | the variable representing the second elements of the ordered pairs in a function; the outputs |
| direct variation | a function of the form $\mathrm{y}=\mathrm{kx}$ where k is not zero |
| domain | the set of first coordinates in a relation |


| f-inverse | The inverse function of $f$ is written $f^{-1}$ and pronounced <br> "f-inverse." |
| :--- | :--- |
| a relation in which each first coordinate is paired with exactly |  |
| function | one second coordinate |
| independent | the variable representing the first elements of the ordered <br> pairs in a function; the inputs |
| variable | an open sentence whose graph is a line; the general form for <br> such an equation is $A x+B y+C=0$ |
| linear equation |  |
| a statistical tool to find a line of best fit and the correlation |  |
| coefficient. |  |

set a collection or group of objects indicated by braces, $\{$ \}
slope the rate of change of a line; change in y over change in $x$; rise over run
slope-intercept form $\quad y=m x+b$ form of a linear equation
solution
a value or values of the variable that make an algebraic sentence true
standard deviation a measure of the distribution or spread of a set of numbers.
stepwise function
term
translation
$x$-axis
x-intercept
$y$-axis
y-intercept a special type of a piecewise-defined function in which each piece is a linear function an individual quantity or number in a sequence a shift or slide of a graph in the coordinate plane the horizontal axis in the coordinate plane the point where the line crosses the $x$-axis the vertical axis in the coordinate plane the point where the line crosses the $y$-axis

## Vocab Arcade



Inverse function
f-inverse

A function $f^{-1}$ that switches the input and output of the original function $f$. So, if $f(x)=y$ then $f^{-1}(y)=x$.

The inverse function of $f$ is written $f^{-1}$ and pronounced "f-inverse."

