Name:

## Puzzle It Project



## Across

1. a value that results from dividing the change in a function of a variable by the change in the variable
2. an equation with two or more inequalities joined together with either "and" or "or" 5. any of the 4 areas made when we divide up a plane by an $x$ and $y$ axis, as shown
3. defined as lines that lie in the same plane but can never meet
4. between two sets is a collection of ordered pairs containing one object from each set
5. the $x$-coordinate of a point where a line, curve, or surface intersects the $x$-axis
6. average of a set of numbers
7. it is the change in the $y$ values divided by the change in the $x$ values, and is
referred to as the change in the rise over the change in the run of a line.
8. the secondary or vertical axis of a system of coordinates, points along which have a value of zero for all other
coordinates
9. the middle number in a sorted list of numbers
10. values that divide a list of numbers into quarters
11. a plot where each data value is split into a "leaf" (usually the last digit) and a "stem" (the other digits)
12. a pair of elements $a, b$ having the property that $(a, b)=(u, v) i f$ and only if $\mathrm{a}=\mathrm{u}, \mathrm{b}=\mathrm{v}$
13. a way to write numbers using the digits

0-9
29. the number which appears most often in a set of numbers
30. when two numbers change but one is always a multiple of the other or if they always have a constant ratio
Down
2. a system that uses one or more numbers, or coordinates, to uniquely determine the position of the points or other geometric elements
3 a point in the equation where the $x$-val is zero
6. a relationship between two variables such that as the value of one variable increases, he other decreases
7. the independent and dependent variables vary in opposite directions
9. the process of estimating a value of $f(x)$ that lies outside the range of the known independent variables
10. a method of curve fitting using linear polynomials to construct new data points within the range of a discrete set of known data points
11. the equation of a straight line in the form $y=m x+b$ where $m$ is the slope of the line and b is its y-intercept
14. the equation of a straight line in the form $y-y 1=m(x-x 1)$ where $m$ is the slope of the line and ( $x 1, y 1$ ) are the coordinates 15. a number which connects two (or even more) variables which are proportional to each other, either directly or inversely 16. a graphic way to display the median, quartiles, and extremes of a data set on a number line to show the distribution of the data
18. a fixed point from which coordinates are measured, as where axes intersect
21. a rate with 1 in the denominator
22. a graph in which the values of two 22. a graph in which the values of two
variables are plotted along two axes, the variables are plotted along two axes, the pattern of the resulting points revealing any correlation present
24. the principal or horizontal axis of a system of coordinates, points along which have a value of zero for all other coordinates

