## Relations and Functions



## Across

3. A numerical pattern that increases or decreases at a constant rate/value. 4. Formed by the intersection of two number lines, the horizontal axis and the vertical axis.
4. The set of first numbers (x-values) of the ordered pairs in a relation.
5. A function graphed with a line or smooth curve.
6. The vertical axis on a coordinate plane.
7. The point at which the $x$-axis and $y$-axis intersect on the coordinate plane $(0,0)$.
8. A relation in which each element of the domain is paired with exactly one element of the range.
9. A set of ordered pairs.
10. A set of numbers, or coordinates written in the form ( $x, y$ ).
11. The difference (d) between the consecutive terms in an arithmetic sequence.
12. A formula used to find the nth-term of an arithmetic sequence.
13. The horizontal axis on a coordinate plane.
14. Illustrates how each element of the domain is paired with an element of the range.

## Down

1. The $x$-intercepts of the graph of a function. The points for which $f(x)=$
2. 
3. The $x$-value of an ordered pair, represents the horizontal placement of the point.
4. A way to name a function that is defined by an equation. Replace y with " $f(x)$ ".
5. If any vertical line passes through the graph of a relation no more than once, then it is a function.
6. The $y$-value of an ordered pair, represents the vertical placement of the point.
7. The set of second numbers ( $y$-values) of the ordered pairs in a relation.
8. A graph that consists of points that are not connected.
9. The result of substituting a value into a function
10. The four regions into which the $x$-axis and $y$-axis separate the coordinate plane.
11. A value substituted for an x-value in a function.
