

NAME: _____ Score _____/10

1. The graph of a function is the set of all points of the form $(a, f(a))$ where a is an element of the domain and $f(a)$ is the corresponding range element.
2. The composition of a function f with a function g is a function named $f \circ g$ whose rule is $f \circ g(x) = f(g(x))$
3. The inverse of a function f , if it exists, is a function named f^{-1} , with the property that
$$f \circ f^{-1}(x) = x \text{ and } f^{-1} \circ f(x) = x$$
4. The inverse of a function is the inverse with respect to **composition**
5. If no horizontal line intersects the graph of a function f in more than one point, then the function f has an **inverse**
6. The vertex of the graph of a quadratic function f is $\left(\frac{-b}{2a}, f\left(\frac{-b}{2a}\right)\right)$
7. A quadratic function is a function whose rule may be written in the form $f(x) = ax^2 + bx + c$.
8. A linear function is a function whose rule may be written in the form $f(x) = mx + b$.
9. The squaring function is the quadratic function f whose rule may be written in the form $f(x) = x^2$
10. To find the x -intercepts of a graph of a function f we let $f(x) = 0$ and solve for x .