

NAME: _____ Score _____/10

Please **print** your name

1. T F A point is on the x-axis if and only if its first coordinate is 0.
2. T F If a vertical line may be drawn so that it intersects a graph in more than one point, then that graph is not the graph of a function.
3. A zero of a function f is a _____ element k for which _____.
4. The _____ of a function is the set of all points whose coordinates satisfy the rule of the function.
5. If p is a function and k is an element of the domain of p , then _____ is the unique range element associated with k by the function p .
6. (3 pts) Consider the function whose rule is $g(x) = \frac{1}{x^2}$.

Evaluate and simplify $g(x) - g(3)$.

7. (2 pts) Consider the function whose rule is given by $f(x) = 8\sqrt{x} - x$.

Show that 64 is a zero of f .