

NAME: \_\_\_\_\_ Score \_\_\_\_\_/10

**SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION**

1. The symbol  $f^{-1}$  is read as \_\_\_\_\_.
2. The inverse of a function is the inverse with respect to \_\_\_\_\_.
3. If a horizontal line may be drawn so that it intersects the graph of a function in more than one point, then the function \_\_\_\_\_ have an inverse.
4. Find the inverse of the function  $f$  whose rule is  $f(x) = \frac{x-1}{5}$ . Show each step in a neat and organized fashion.
  
5. Without finding the inverse of either  $f$  or  $g$ , verify that the two functions  $f$  and  $g$  whose rules are  $f(x) = 2x$  and  $g(x) = \frac{x}{2}$  are inverses of each other.