DATE: _____

Inverse Derivatives Practice

x	$f(x)$	$f'(x)$	$g(x)$	$g'(x)$
1	6	4	2	5
2	9	2	3	1
3	10	-4	4	2
4	-1	3	6	7

1. The functions f and g are differentiable for all real numbers, and g is strictly increasing. The table shows given values of the functions and their first derivatives at selected values of x.

If g^{-1} is the inverse of g, write the equation of the line tangent to the graph of $y = g^{-1}(x)$ at $x = 2$.

---

x	$f(x)$	$f'(x)$	$g(x)$	$g'(x)$
-1	3	-2	2	6
0	-2	-1	0	-3
1	0	1	-1	2
2	-1	4	3	-1

2. The functions f and g are differentiable for all real numbers. The table shows gives the values of the functions and their first derivatives at selected values of x.

Let $h(x)$ be the function given by $h(x) = f(g(x))$. Find $(h^{-1})'(3)$, if h^{-1} is he inverse of h.