Name: $\qquad$

1. Let $y=f(x)$ be a function so that $f(-2)=1$ and $f^{\prime}(-2)=3$.
(a) Write the microscope equation at $x=-2$.
(b) Graph the graph of what you would see in a microscope near $x=-2$.
(c) Use the microscope equation to estimate $f(-1.9)$.
(d) Use the microscope equation to estimate $f(-2.3)$.
2. If $H(2)=.3$ and $H^{\prime}(2)=4$ then what is a reasonable estimate the solution to $H(x)=0$ ?
