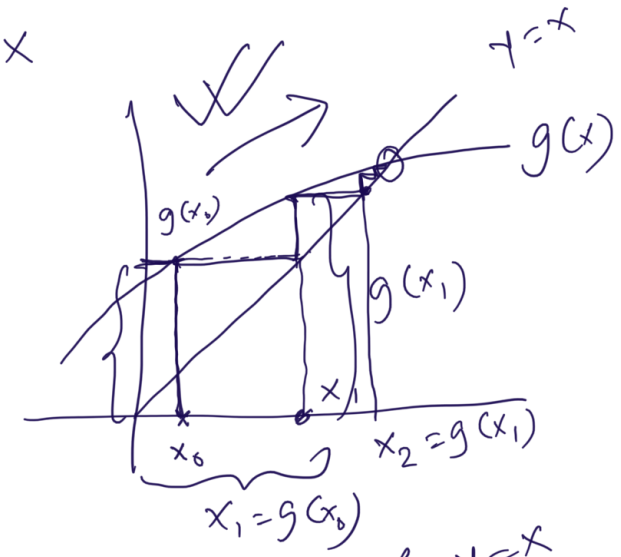
$f(x) = 0$, for x

$x = g(x)$

$x \pm f(x) = x$

$\Rightarrow g(x) = x$

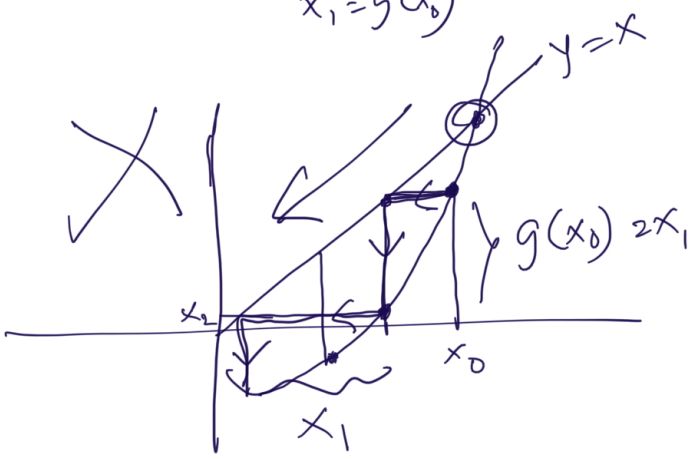


$x_1 = g(x_0)$

$x_2 = g(x_1)$

$x_3 = g(x_2)$

$\}$



$r = g(r)$

$x_{k+1} = g(x_k)$

$e_k = |x_k - r|$ Error at step k

$e_{k+1} = |x_{k+1} - r| = |g(x_k) - g(r)|$

$= |g'(\xi)(x_k - r)|$

$|1| = \dfrac{g(x_k) - g(r)}{x_k - r}$