

$$e_{k+1} \leq M e_k^2$$

Quadratic Convergence

$e_k \sim 0.1 = 10^{-1}$	\downarrow \downarrow \downarrow \downarrow \downarrow	Bisection
$e_{k+1} \sim 10^{-2}$		e_{k+1}
$e_{k+2} \sim 10^{-4}$		$\sim \frac{1}{2} e_k$
$e_{k+3} \sim 10^{-8}$		
$e_{k+4} \sim 10^{-16}$		

$x^* =$