

$f(x)=x^3+x+1$

$f'(x)=3x^2+1$

$t_k(x)=f(x_k)+(x-x_k)f'(x_k)$

$x_{k+1}=x_k-f(x_k)/f'(x_k)$

$k=2$

$x_2=0.9577$

