

The given equation is: $x - \cos(x) = 0$.

Enter the first initial approximation: 0.5

Enter the maximum number of iterations: 10

Enter the measure of accuracy: 10^{-5}

The Newton-Raphson iterations are given as:

k	x_k	$f(x_k)$
1.0000000000	0.5000000000	-0.3775825619
1.0000000000	0.7552224171	0.0271033119
2.0000000000	0.7391416661	0.0000946154
3.0000000000	0.7390851339	0.0000000012
4.0000000000	0.7390851332	0.0000000000

A root of the given equation is 0.7390851332 .

An approximate root (with tolerance 0.000010) of the given equation is 0.7390851332 ✓

.
>>