

1. Let $f(x) = e^x - 2x - 2$.

(a) Show that $f(x) = 0$ has root in $[1, 2]$.

(b) Perform 10 iterations using Secant method.

i	x	$f(x)$
0	1.0000	None
1	2.0000	None
...		

(c) Perform Secant iterations until $|f(x)| < 10^{-4}$.

i	x	$f(x)$
0	1.0000	None
1	2.0000	None
...		

(d) Perform Secant iterations until $|x - x_1| < 10^{-4}$.

i	x	$f(x)$
0	1.0000	None
1	2.0000	None
...		