

```

Newton roots
x0 = 0.422031; eps = 0.000001; kMax = 5
k = 0 xk = 0.421879; f(xk) = -0.000000
method secant
k = 0 xk = 0.421879; xk - xk-1 = 0.000000; xk - root = 0.000000; f(xk) =
0.000000
method chord
k = 0 xk = 0.4218826; xk - xk-1 = 0.0000038; xk - root = 0.0000038; f(xk) =
0.0000130
method iteration
k = 0 xk = 0.42192; xk - xk-1 = 0.00004; xk - root = 0.00005; f(xk) =
0.00016
k = 1 xk = 0.42190; xk - xk-1 = 0.00002; xk - root = 0.00003; f(xk) =
0.00009
k = 2 xk = 0.42189; xk - xk-1 = 0.00001; xk - root = 0.00001; f(xk) =
0.00005
k = 3 xk = 0.42189; xk - xk-1 = 0.00001; xk - root = 0.00001; f(xk) =
0.00003
k = 4 xk = 0.42188; xk - xk-1 = 0.00000; xk - root = 0.00000; f(xk) =
0.00001
difference (secant) of roots and quantity of iterations: 0.00000; 1
difference (chord) of roots and quantity of iterations: 0.00000; 1
difference (iteration) of roots and quantity of iterations: 0.00000; -3
Newton roots
x0 = 0.577656; eps = 0.000001; kMax = 5
k = 0 xk = 0.577609; f(xk) = -0.000000
method secant
k = 0 xk = 0.577609; xk - xk-1 = 0.000000; xk - root = 0.000000; f(xk) = -
0.000000
method chord
k = 0 xk = 0.5775380; xk - xk-1 = 0.0000712; xk - root = 0.0000711; f(xk) =
0.0002688
method iteration
k = 0 xk = 0.57791; xk - xk-1 = 0.00008; xk - root = 0.00030; f(xk) = -
0.00114
k = 1 xk = 0.57783; xk - xk-1 = 0.00006; xk - root = 0.00022; f(xk) = -
0.00084
k = 2 xk = 0.57777; xk - xk-1 = 0.00004; xk - root = 0.00016; f(xk) = -
0.00061
k = 3 xk = 0.57773; xk - xk-1 = 0.00003; xk - root = 0.00012; f(xk) = -
0.00045
k = 4 xk = 0.57770; xk - xk-1 = 0.00002; xk - root = 0.00009; f(xk) = -
0.00033
difference (secant) of roots and quantity of iterations: 0.00000; 1
difference (chord) of roots and quantity of iterations: 0.00007; 1
difference (iteration) of roots and quantity of iterations: 0.00030; -3
Newton roots
x0 = 0.994844; eps = 0.000001; kMax = 5
k = 0 xk = 0.994805; f(xk) = 0.000000
method secant
k = 0 xk = 0.994805; xk - xk-1 = 0.000000; xk - root = 0.000000; f(xk) =
0.000000
method chord
k = 0 xk = 0.9949233; xk - xk-1 = 0.0001458; xk - root = 0.0001188; f(xk) =
0.0040345
k = 1 xk = 0.9948775; xk - xk-1 = 0.0000732; xk - root = 0.0000730; f(xk) =
0.0024788
method iteration
k = 0 xk = 0.99484; xk - xk-1 = 0.00007; xk - root = 0.00003; f(xk) =
0.00105
k = 1 xk = 0.99478; xk - xk-1 = 0.00006; xk - root = 0.00003; f(xk) = -
0.00094
k = 2 xk = 0.99483; xk - xk-1 = 0.00005; xk - root = 0.00002; f(xk) =
0.00084

```

```
k = 3 xk = 0.99478; xk - xk-1 = 0.00005; xk - root = 0.00002; f(xk) = -  
0.00075  
k = 4 xk = 0.99482; xk - xk-1 = 0.00004; xk - root = 0.00002; f(xk) =  
0.00067  
difference (secant) of roots and quantity of iterations: 0.00000; 0  
difference (chord) of roots and quantity of iterations: 0.00012; -1  
difference (iteration) of roots and quantity of iterations: 0.00002; -4
```