

Zwei Methoden zur Berechnung von  $f(x) = (1 + \sqrt{1 - x^2})^{-1}$   
ohne Compiler-Optimierung

```
iter= 0  x=1.000e+00  f1=1.0000000000000000e+00  f2=1.0000000000000000e+00
iter= 1  x=1.000e-01  f1=5.012562893380034e-01  f2=5.012562893380045e-01
iter= 2  x=1.000e-02  f1=5.000125006249245e-01  f2=5.000125006250391e-01
iter= 3  x=1.000e-03  f1=5.000001249699793e-01  f2=5.000001250000625e-01
iter= 4  x=1.000e-04  f1=5.000000080634948e-01  f2=5.000000012500000e-01
iter= 5  x=1.000e-05  f1=5.000000413701854e-01  f2=5.000000000125000e-01
iter= 6  x=1.000e-06  f1=5.000444502911704e-01  f2=5.000000000001250e-01
iter= 7  x=1.000e-07  f1=4.996003610813202e-01  f2=5.000000000000012e-01
iter= 8  x=1.000e-08  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter= 9  x=1.000e-09  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=10  x=1.000e-10  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=11  x=1.000e-11  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=12  x=1.000e-12  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=13  x=1.000e-13  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=14  x=1.000e-14  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=15  x=1.000e-15  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
```

Zwei Methoden zur Berechnung von  $f(x) = (1 + \sqrt{1 - x^2})^{-1}$   
mit Compiler-Optimierung

```
iter= 0  x=1.000e+00  f1=1.0000000000000000e+00  f2=1.0000000000000000e+00
iter= 1  x=1.000e-01  f1=5.012562893380045e-01  f2=5.012562893380045e-01
iter= 2  x=1.000e-02  f1=5.000125006250389e-01  f2=5.000125006250391e-01
iter= 3  x=1.000e-03  f1=5.000001250000659e-01  f2=5.000001250000625e-01
iter= 4  x=1.000e-04  f1=5.000000012492840e-01  f2=5.000000012500000e-01
iter= 5  x=1.000e-05  f1=5.000000001705028e-01  f2=5.000000001250000e-01
iter= 6  x=1.000e-06  f1=4.999999980020984e-01  f2=5.00000000001250e-01
iter= 7  x=1.000e-07  f1=5.000015158851399e-01  f2=5.000000000000012e-01
iter= 8  x=1.000e-08  f1=5.003593026020601e-01  f2=5.000000000000000e-01
iter= 9  x=1.000e-09  f1=4.878909776184767e-01  f2=5.000000000000000e-01
iter=10  x=1.000e-10  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=11  x=1.000e-11  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=12  x=1.000e-12  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=13  x=1.000e-13  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=14  x=1.000e-14  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
iter=15  x=1.000e-15  f1=0.0000000000000000e+00  f2=5.000000000000000e-01
```