

Equation: $f = x^2 - 2 = 0$

Intervall after 0.Iteration: $[a, b] = [1, 3]$

Intervall after 1.Iteration: $[a, b] = [1, 2]$

Intervall after 2.Iteration: $[a, b] = [1, 3/2]$

Intervall after 3.Iteration: $[a, b] = [5/4, 3/2]$

Intervall after 4.Iteration: $[a, b] = [11/8, 3/2]$

Intervall after 5.Iteration: $[a, b] = [11/8, 23/16]$

Intervall after 6.Iteration: $[a, b] = [45/32, 23/16]$

Intervall after 7.Iteration: $[a, b] = [45/32, 91/64]$

Intervall after 8.Iteration: $[a, b] = [181/128, 91/64]$

Resolution reached

Equation: $f = \sin(x) - \cos(2x) = 0$

Intervall after 0.Iteration: $[a, b] = [0, 1]$

Intervall after 1.Iteration: $[a, b] = [1/2, 1]$

Intervall after 2.Iteration: $[a, b] = [1/2, 3/4]$

Intervall after 3.Iteration: $[a, b] = [1/2, 5/8]$

Intervall after 4.Iteration: $[a, b] = [1/2, 9/16]$

Intervall after 5.Iteration: $[a, b] = [1/2, 17/32]$

Intervall after 6.Iteration: $[a, b] = [33/64, 17/32]$

Intervall after 7.Iteration: $[a, b] = [67/128, 17/32]$

Resolution reached

Equation: $f = x^3 + 7x^2 + 6 = 0$

Intervall after 0.Iteration: $[a, b] = [2.700000e+00, 6.500000e+00]$

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