Startwert $x_0 = 0.5$ (Vereinfachtes Newton-Verfahren)

$$x_{n+1} = x_n - \frac{f(x_n)}{f'(x_0)}$$

$$x_1 = x_0 - \frac{f(x_0)}{f'(x_0)} = 0.4847 \qquad x_2 = x_1 - \frac{f(x_1)}{f'(x_0)} = 0.4857$$

$$x_3 = x_2 - \frac{f(x_2)}{f'(x_0)} = 0.4856 \qquad x_4 = x_3 - \frac{f(x_3)}{f'(x_0)} = 0.4856$$

Startwerte $x_0 = -1$ und $x_1 = -1.2$ (Sekanten-Verfahren)

$$x_{n+1} = x_n - \frac{x_n - x_{n-1}}{f(x_n) - f(x_{n-1})} \cdot f(x_n)$$

$$x_2 = x_1 - \frac{x_1 - x_0}{f(x_1) - f(x_0)} \cdot f(x_1) = -1.8610 \qquad x_3 = x_2 - \frac{x_2 - x_1}{f(x_2) - f(x_1)} \cdot f(x_2) = -1.3494$$

$$x_4 = x_3 - \frac{x_3 - x_2}{f(x_3) - f(x_2)} \cdot f(x_3) = -1.4326 \qquad x_5 = x_4 - \frac{x_4 - x_3}{f(x_4) - f(x_3)} \cdot f(x_4) = -1.5594$$