

Gander, Walter

On Halley's iteration method. (English) Zbl 0574.65041
Am. Math. Mon. 92, 131-134 (1985).

The author considers the iteration method $x_{k+1} = F(x_k)$ where $F(x) = x - (f(x)/f'(x)) \cdot G(x)$ for computing a zero of f . He shows that *E. Halley's* method [Methodus Nova, Accurata et Facilis Inveniendi Radices Aequationum Quarumcumque Generaliter, Sine Praevia Reductione, Philos. Trans. Roy. Soc. London, 18, 136-148 (1694)] can be derived by choosing $G(x)$ appropriately.

Reviewer: G.Alefeld

MSC:

65H05 Numerical computation of solutions to single equations

Cited in **2** Reviews
Cited in **67** Documents

Keywords:

Halley's iteration method; Newton correction; Halley correction; Euler correction

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