

EX.1.1.3, Sauer3

Consider the equations (a) $x^3 = 9$, (b) $3x^3 + x^2 = x + 5$, (c) $\cos^2(x) + 6 = x$.

Starting from an interval of length one that contains a root of the equation, apply two steps of the Bisection Method to find an approximate root within $1/8$ of the true root.