Root findings : equations f(x) = 0

- Polynomial equations : Bairstow's method is an efficient algorithm for finding the roots of a real polynomial of arbitrary degree
  - Polynomials in NumPy
  - polynomial module, including polyroots(c) to compute the roots of a polynomial.
- Bisection method (dichotomy) : very simple and robust method, but relatively slow. It assumes continuity of the function, and obtain one roots. The algorithm is based on a loop invariant property : an interval [a, b] is said to bracket a root if f(a) and f(b) have opposite signs.
- Secant method (retains the last two computed points)
- Regula falsi (retains the points which preserve bracketing)
- Newton-Raphson method