

Mendel University

## Roots finding by bisection of interval

R. Mařík

## 1. Instructions

- On the next page, enter a continuous function  $P(x)$  and the lower and upper bound for the solution of  $P(x) = 0$ .
- Press  button.
- Error NaN indicates problem with arithmetics.
- If the lower bound is too close to upper bound, the Acrobat Reader may crash.
- We round all computation into four decimal digits.
- When you start the computation, the fields with the function and initial bounds are locked. They will be unlocked when pressing the  button.

## Bisection

$$P(x) = \begin{matrix} a & c & b \\ P(a) & P(c) & P(b) \end{matrix} \quad \begin{matrix} a = \\ P(c) \end{matrix} \quad \begin{matrix} b = \\ P(b) \end{matrix} \quad \epsilon$$