Instructions for seminars from Numerical Analysis: Solving nonlinear equations

All methods from the course are implemented in document korenyE.mw or its Czech update koreny2015.mw. For the iterations method, you have to choose your own iterating function in procedure iterace so that convergence is achieved. Procedure Mpi makes an automatic choice which need not be satisfactory.

You will be expected to be able to use all these methods and estimate errors. During experiments, you can choose mainly the method, the function, and the initial estimate. You should pay attention mainly to the following questions:

- 1. comparison of methods,
- 2. comparison of the real errors with their estimates,
- 3. convergence and its speed,
- 4. appropriateness of various ending conditions,
- 5. possibilities of speeding up the convergence of the iteration method.