Preparation guide for Quiz 02

1. Study how to obtain rate of convergence numerically by means of scaled plot.

2. Study the definition of 'converge to p of order α' on page 79. Note the difference between 'rate, or order, of convergence $O(\beta_n)$' on p37 and 'converge to p of order α'.

3. Study the method and convergence analysis (proof) of fixed point iteration and Newton's method.

4. Study how to estimate number of iterations needed for linearly convergent methods such as bisection and fixed point iteration.

5. Study how to modify the fixed point iteration when it does not converge (postponed).

6. Study the secant method and method of false position. In particular, how to get p_{n+1} from previous p_n's.

7. Study how to call the subroutines needed in hw 03.