

## Section 2.4 Worksheet: Error Analysis for Iterative Methods

1. In this section we distinguish linear from quadratic convergence (especially). In the case of FPI with  $g'(p) \neq 0$ , what sort of convergence should we expect, and why?
2. What does the concept of **multiplicity** of a root have to do with our methods?
3. In Example 2, p. 79, the claim is that convergence is not quadratic. Can you characterize the rate of convergence better than that?