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Problems
1. Do problems 6 and 8 on p. 283 of your textbook. For problem 6 also:
a. prove that ϕ_i has a fixed point if and only if f has a root, and
b. check for each ϕ_i if the conditions for existence and uniqueness of a fixed point are staisfied.

Program
1. Program the fixed point iteration algorithm. Apply your program to at least two fixed-point methods for problem 8 on p. 284. Use both absolute error and relative error as a stopping criteria and tolerance of 10^{-5}. Allow a maximum of 100 iterations.

* Math 6630.