

Lab assignment 1: Root finding methods

1. (a) Define the following function in MATLAB: $f(x) = \tan(\pi x) - 6$.
(b) Plot the curve of f on $[-1, 1]$.
(c) Apply the secant method to the function

$$f(x) = \tan(\pi x) - 6$$

with the initial guesses 0 and 0.48. What is the behavior of the iterates?