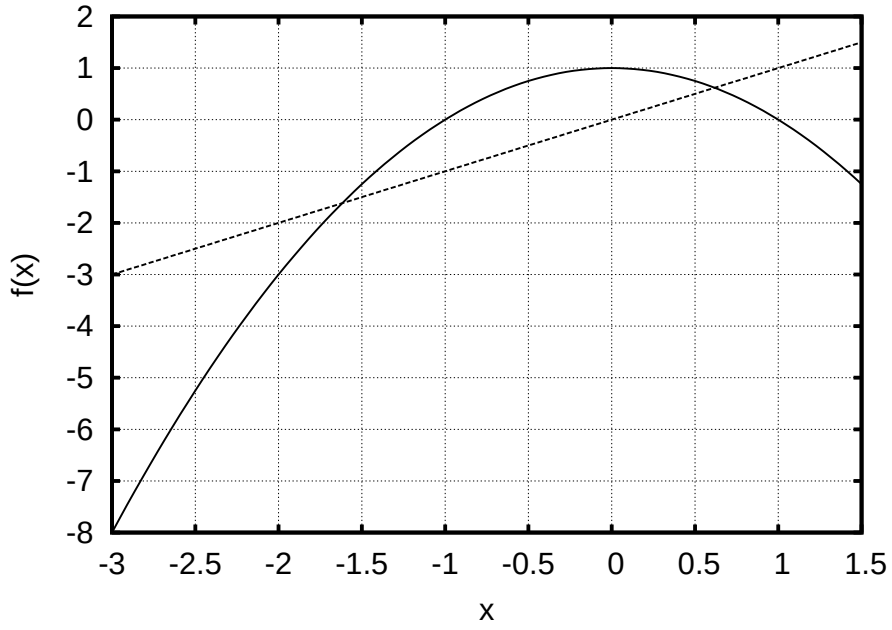
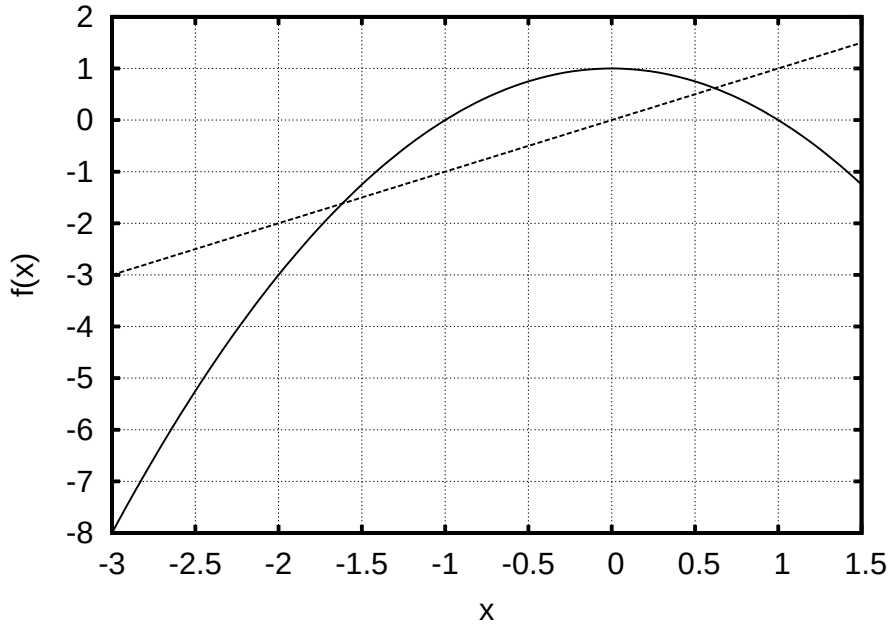
Even More Graphical Iteration

Chaos and Fractals

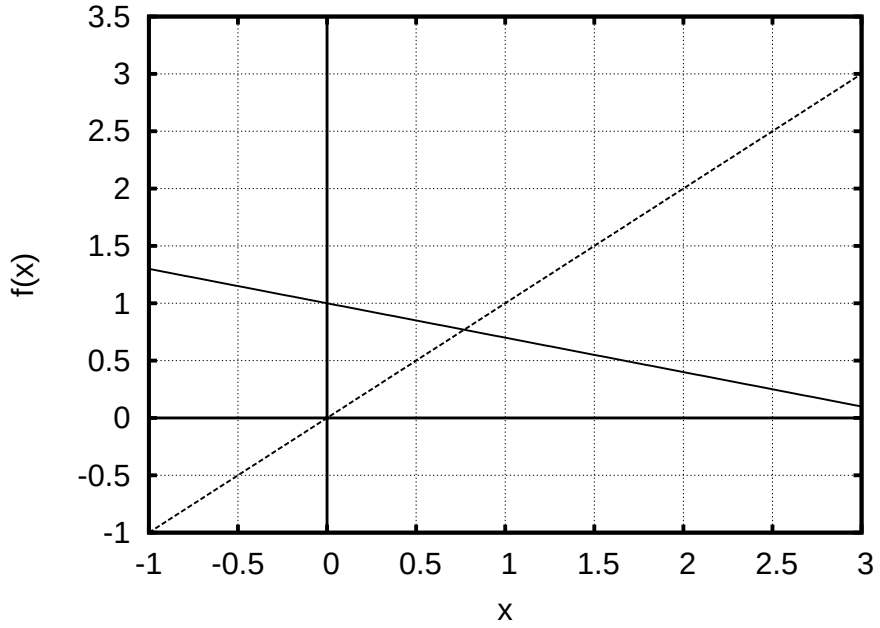
College of the Atlantic. Winter 2016

1. Below are two graphs of a function $f(x)$. Find all fixed points, and use graphical iteration to determine their stability.





2. Below is a linear function. Use graphical techniques to find and classify all fixed points. Sketch the time series for the initial condition $x_0 = -1$.



3. Below is a another linear function. Use graphical techniques to find and classify all fixed points. Sketch the time series for the initial condition $x_0 = 0$.