**2.2.1)** A way to graphically to determine the convergence of the algorithm is to plot the function. If we know that the function is linear: a line = linear (k is inbetween 0 and 1), concave down = superlinear (k=0), and concave up = sublinear (k=1). To determine the order of convergence we set alpha equal to the ratio after manipulating the given limit.

Alpha = log|(p\_n+1 -p) / (p\_n – p)| / log |(p\_n-p)/(p\_n+1 -p)|