Forced Van Der Pol Oscillator - Matlab Optimization

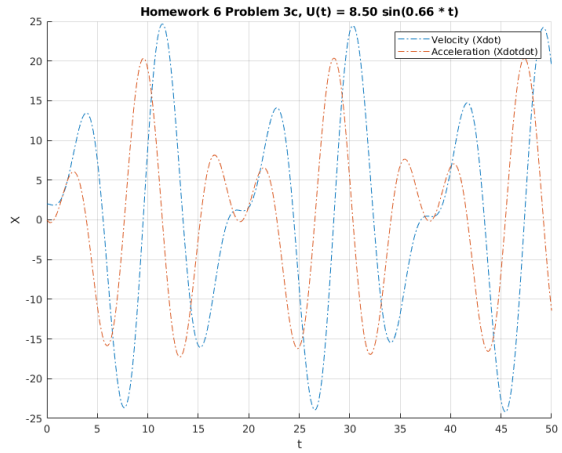
The system equation of the forced Van der Pol oscillator is:

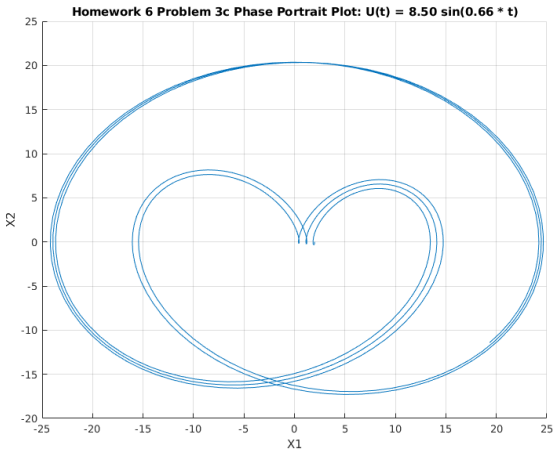
$$\ddot{x}(t) - \mu(1 - x^2)\dot{x} + x(t) = u(t)$$

Let $\mu = 10$, $x(0) = 2$, $\dot{x}(0) = 0$.

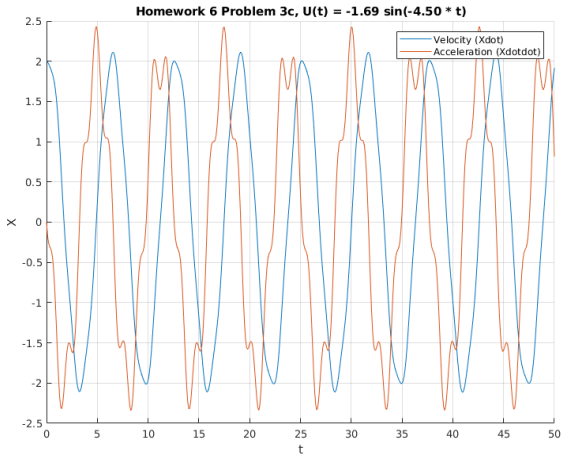
We will examine the performance of a sinusoid at regulating this system.
Consider u(t) = Ksin(ωt) for different constants K and ω.

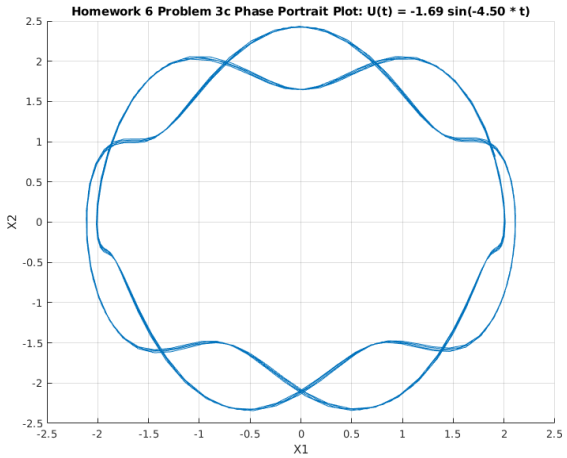
Van-der-Pol-entines Day:



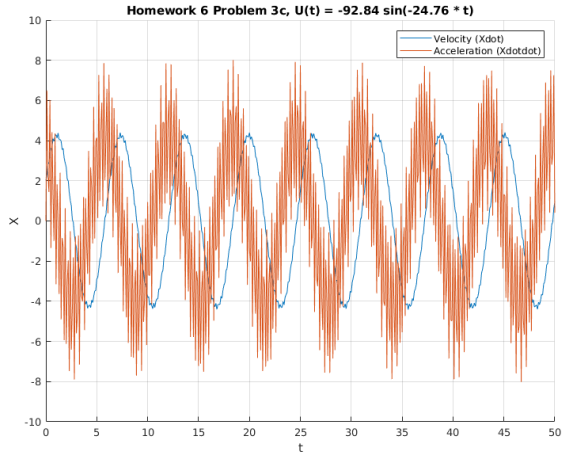


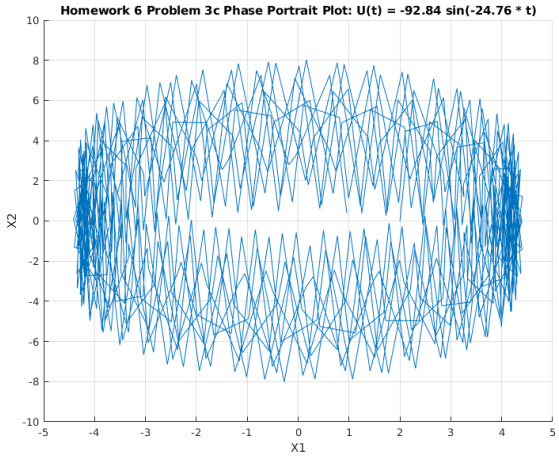
Electron Cloud:



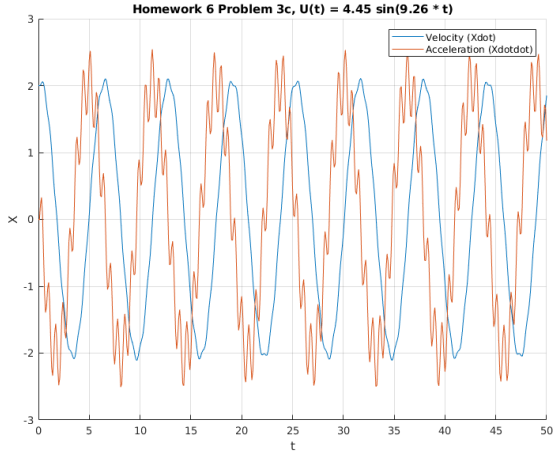


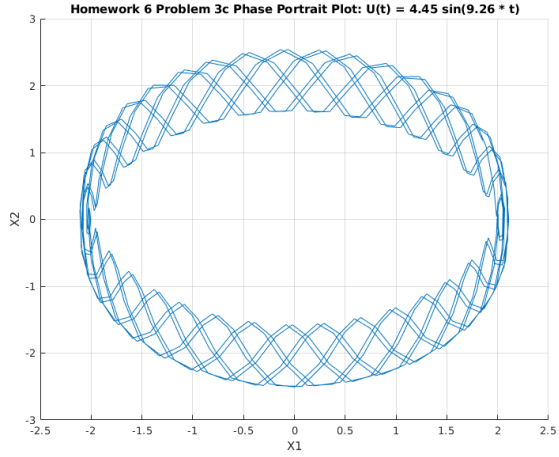
Kindergarten Artwork:



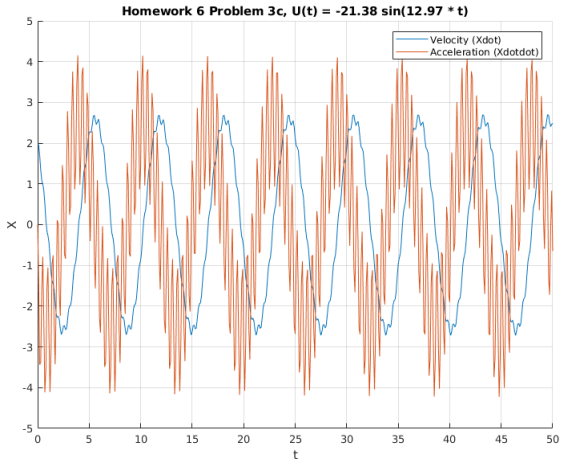


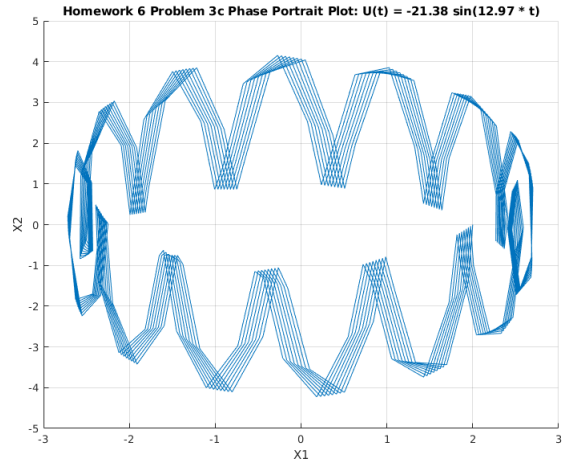
Tiara:



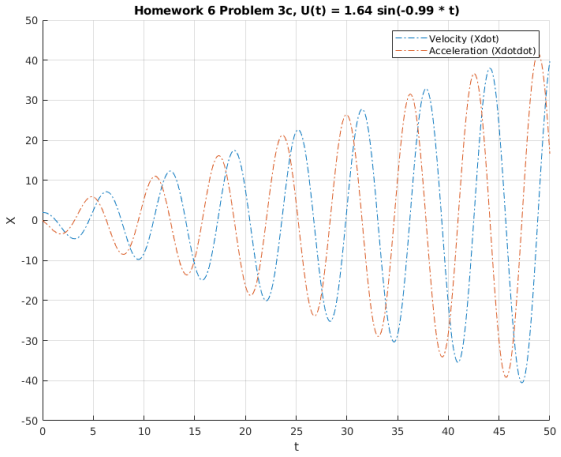


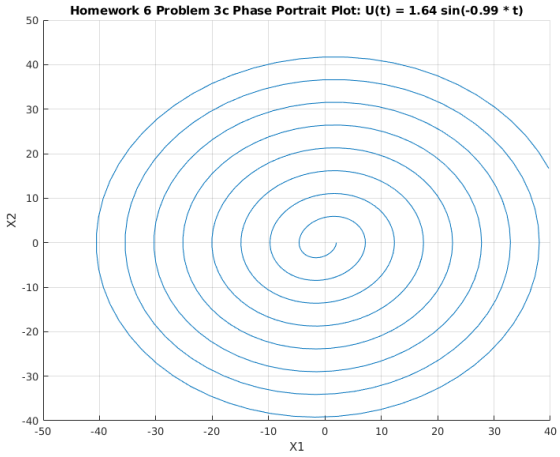
Loofah:





Twisters:





Clamshell?: