ENEE 434 Homework 5
Due Tu 03/15/05

#1. 45 points (Hopfield high gain)

Problem E18.3 with the $2a_1a_2$ replaced by $-2a_1a_2$ in V(**a**).

#2. 45 points (Hopfield non-high gain)

For the equilibrium points of #1 above design a Hopfield continuous time neural network to give them when the activation functions are a=tanh(n).

#3. 10 points (discrete time Hopfield)

In the Matlab neural network toolbox there is a (discrete time) newhop.

a) Draw the architectural structure for the two kinds of Hopfield neural networks, that is, for the continuous time and the discrete time ones.

b) Give a comparison between the two kinds of Hopfield neural networks.