

Perceptron Homework

- Assume a 3 input perceptron plus bias (it outputs 1 if $\text{net} > 0$, else 0)
- Assume a learning rate c of 1 and initial weights all 1: $\Delta w_i = c(t - z) x_i$
- Show weights after each pattern for just one epoch
- Training set
 - 1 0 1 \rightarrow 0
 - 1 .5 0 \rightarrow 0
 - 1 -.4 1 \rightarrow 1
 - 0 1 .5 \rightarrow 1

Pattern	Target	Weight Vector	Net	Output	ΔW
		1 1 1 1			

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Pattern	Target	Weight Vector	Net	Output	ΔW
1 0 1 1	0	1 1 1 1	3	1	-1 0 -1 -1
1.5 0 1	0	0 1 0 0	.5	1	-1 -.5 0 -1
1 -.4 1 1	1	-1 .5 0 -1	-2.2	0	1 -.4 1 1
0 1.5 1	1	0 .1 1 0	.6	1	0 0 0 0
		0 .1 1 0			