Linear Regression Homework

- Assume we start with all weights as 0 (don't forget the bias)
- What are the new weights after one iteration through the following training set using the delta rule with a learning rate of .2
- How does it then generalize for the novel input (1, .5)?

x_1	x_2	Target
.3	.8	.7
-.3	1.6	-.1
.9	0	1.3

Linear Regression Homework

$$\Delta w_i = c(t - net)x_i$$

- Assume we start with all weights as 0 (don't forget the bias)
- What are the new weights after one iteration through the following training set using the delta rule with a learning rate $c = .2$
- How does it generalize for the novel input (1, .5)? .279-.009+.295 = .565

x_1	x_2	Target	Net	w_1	w_2	Bias
				0	0	0
.3	.8	.7	0	.042	.112	.140
-.3	1.6	-.1	.307	.066	-.018	.059
.9	0	1.3	.118	.279	-.018	.295

$$0 + .2(.7 - 0).3 = .042$$