Lecture 02 = Linear Model

Linear Regression $\hat{y} = x * w$

Training Loss $loss = (\hat{y} - y)^2 = (x * w - y)^2$

Hours, x	Points y	Prediction = $\hat{y}$ (w=3)	Loss (w=3)
1	2	3	$(1)^2 = 1$
2	4	6	$(2)^2 = 4$
3	6	9	$(3)^2 = 9$

mean = 14/3

MSE = 14/3

Mean, mean square error

$$MSE = \frac{1}{N} \sum_{n=1}^{N} (\hat{y}_n - y_n)^2$$