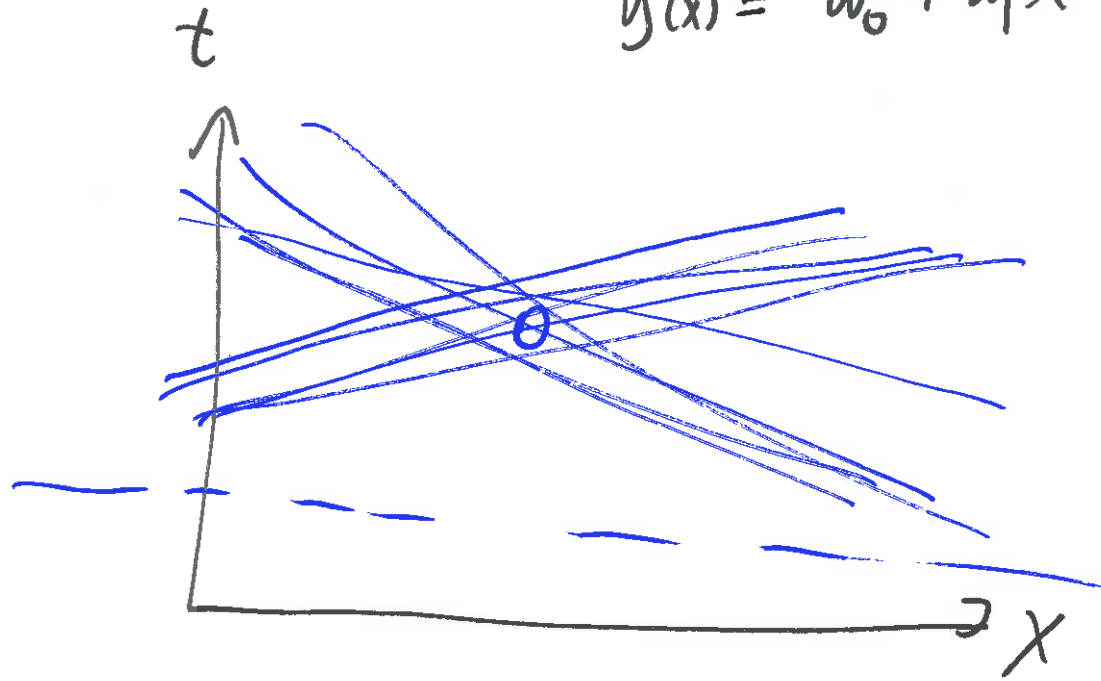
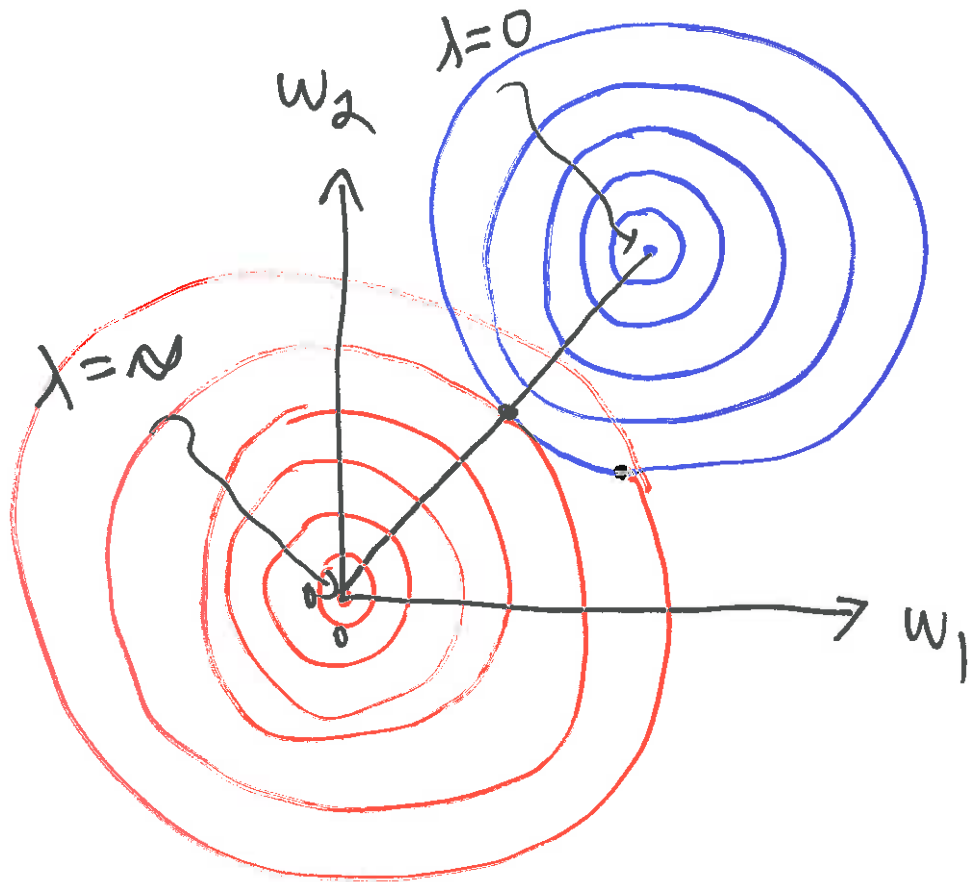


$$y(x) = w_0 + w_1 x$$

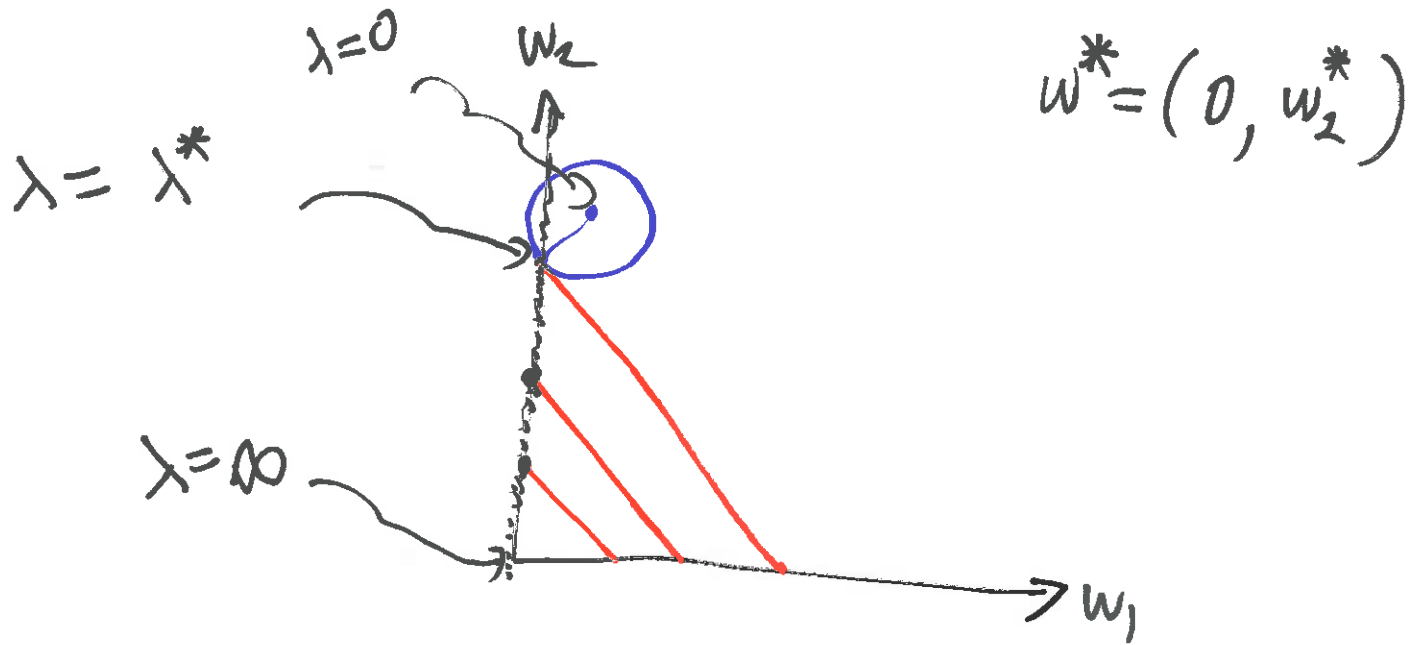


$$E(w) = \frac{1}{2} \sum_{n=1}^N \{y(x_n, w) - t_n\}^2 + \frac{\lambda}{2} w^T w$$

$$w^T w = \sum_{i=1}^D w_i^2$$



$$E(w) = \frac{1}{2} \sum_{n=1}^N \{y(x_n, w) - t_n\}^2 + \frac{\lambda}{2} \sum_{i=1}^D |w_i|$$



$$E(w) = \frac{1}{2} \sum_{n=1}^N \{y(x_n, w) - t_n\}^2 + \frac{\lambda}{2} \sum_{i=1}^D |w_i|$$

\downarrow
 $\|w\|_1$

"L₁ regularizer"

