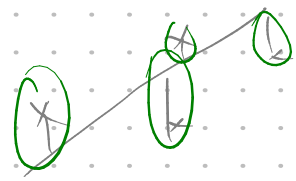
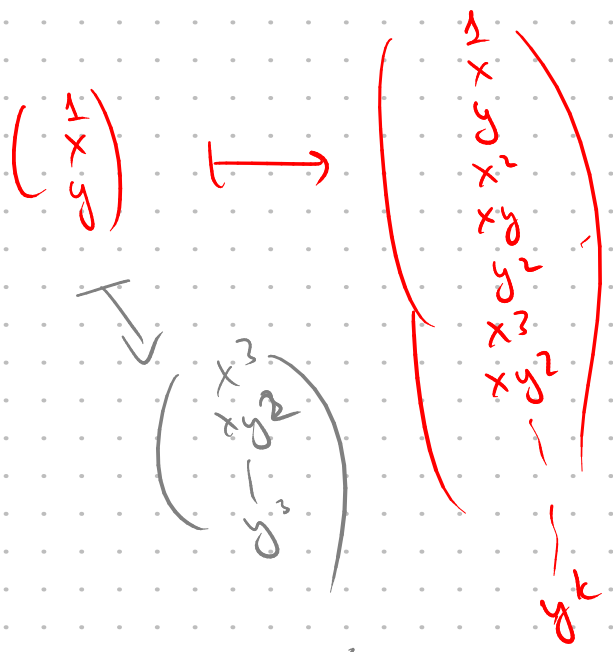
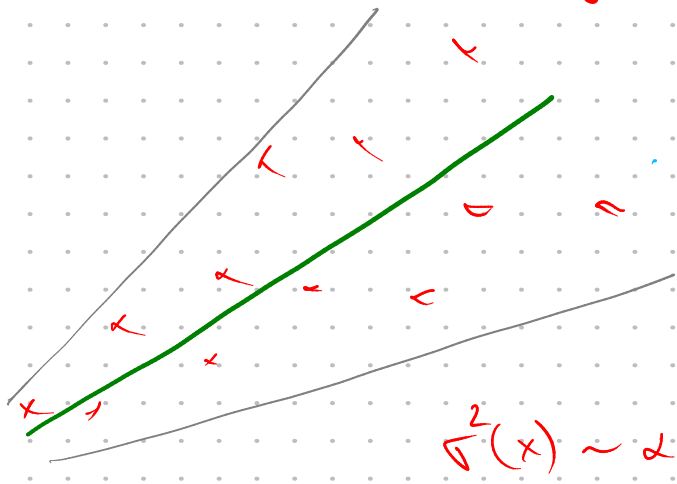


kernel methods
SVM



$$\bar{y} \sim X\bar{w} + \bar{E}$$

$$\bar{E} \sim \mathcal{N}(\bar{0}, \begin{pmatrix} \sigma_1^2 & & 0 \\ & \sigma_2^2 & \\ 0 & & \ddots \\ & & & \sigma_d^2 \end{pmatrix})$$



covariate shift

$$D = \{d_1, d_2, \dots, d_n\}$$

$$L = \sum (y_n - \bar{x}_n^T \bar{w})^2 + \alpha \sum w_i^2 \rightarrow \min$$

Annotations: \bar{w} is a parameter, α is a hyperparameter, w_i are weights.

d_1, \dots, d_m

Empirical Bayes