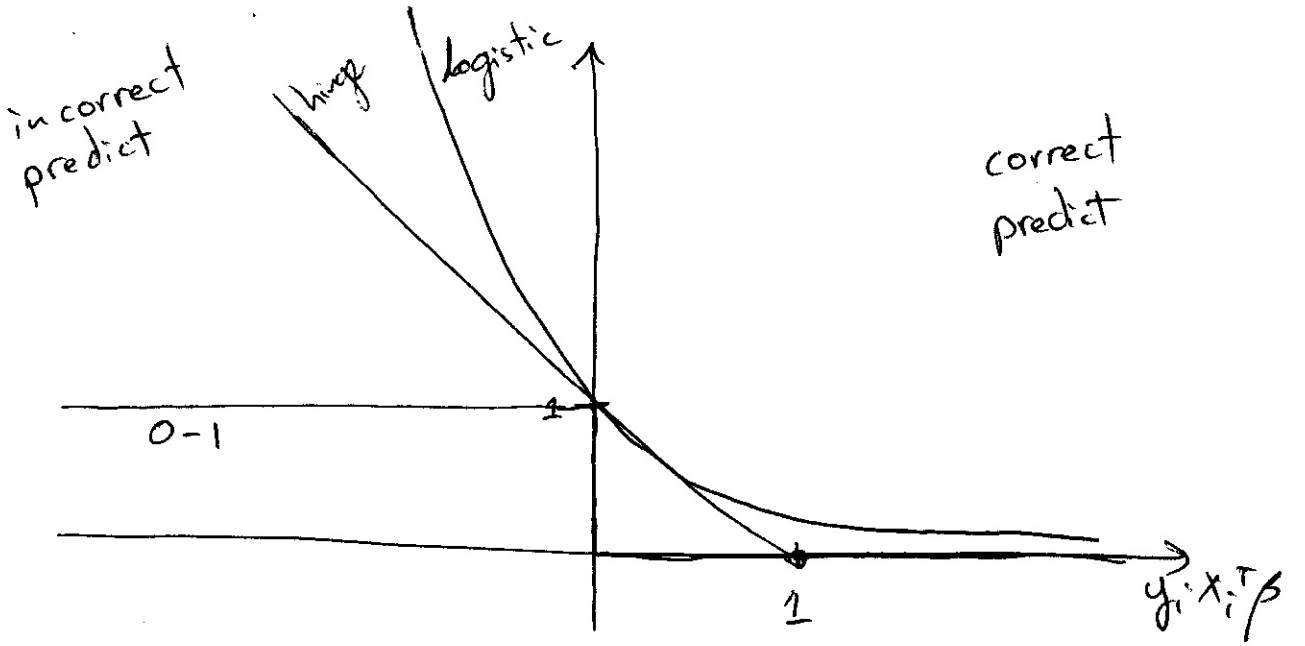
$$\ell_{hinge}(g_\beta(x), y) = \max\{0, 1 - y_i \beta^T x_i\}$$

compare to logistic regression

$-\log\text{-likelihood} \propto \log\left(1 + e^{-y_i \beta^T x_i}\right)$



Compare to sqr error $(1 - y_i x_i^T \beta)^2$?

Above 0-1 loss is $\mathbb{1}\{y_i \beta^T x_i \leq 0\}$.