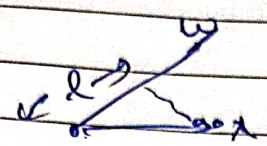
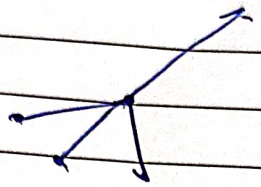
PageWork
D D M M Y Y Y Y

SVM

→ Hard margin problem
Soft margin problem



$w^T x \geq 0$



$w^T x \leq 0$

RBF

From the data we have to find the weights

$w^T x = r\|w\|$ → norm of weights

min $\frac{\|w\|}{2}$

$\Rightarrow 1 - y(w^T x + b) \leq 0.$

↳ rearranging

$y(w^T x + b) - 1 \geq 0$

⇒ Radial Basis Function → extension of SVM

↓

nonlinear

↓

boundary which is a circle