

a)  $\varepsilon_i = 0$

$x_i$  is classified correctly

It lies outside the margin or on the margin

b)  $0 < \varepsilon_i \leq 1$

$x_i$  is classified correctly

It lies within the margin

c)  $\varepsilon_i > 1$  It is misclassified

It lies beyond the separating hyperplane on the other side.