from 5.2)
①

(z_2, z_3, z_4, z_5)

$(x=0)$

Support vector $(x=2)$

⟶ Decision boundary $(x=1)$
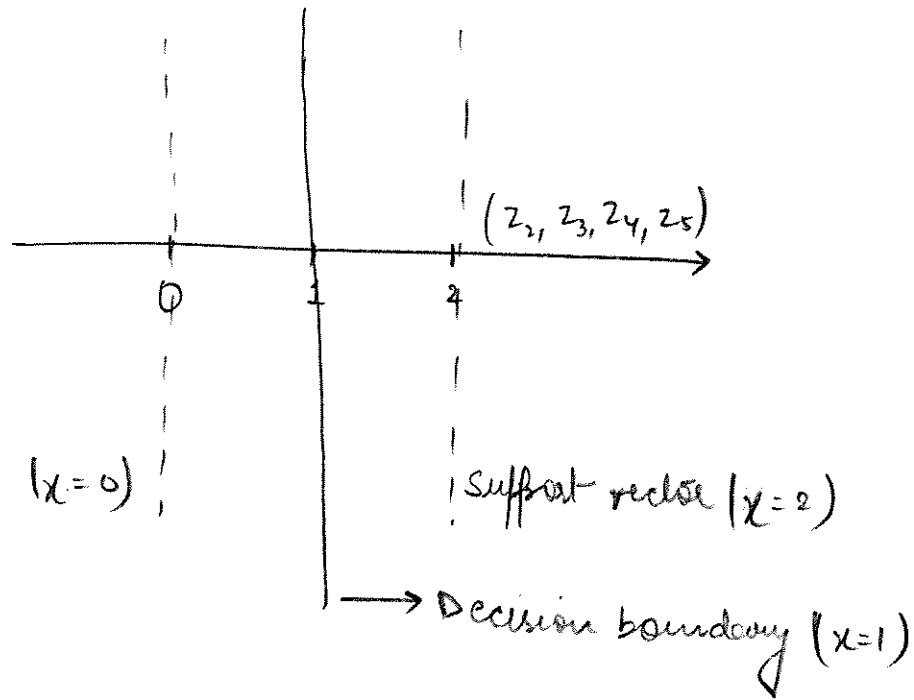
∴ $z_1 = k(x_1)$ is the support vector for positive points &

z_2, z_3, z_4, z_5 are the support vectors for -ve half space.

Hence, we can select one of (z_2, z_3, z_4, z_5) as the support vector for -ve half space.

∴ the SVM can be —

if $y = -1$, $1 - z \leq -1$ &

if $y = 1$, $1 - z \geq 1$ **Ans**