OvR, OvO, MVM

① OvR decision rule: $\underline{x} \in S_k$ iff $g_k(x) > 0$ and $g_j(x) < 0$ $\forall j \neq k$
One vs. Rest

↑
class k

② OvO decision rule: $\underline{x} \in S_k$ iff $g_{kj}(x) > 0$ $\forall j \neq k$
One vs. One

③ MVM decision rule: $\underline{x} \in S_k$ iff $g_k(x) > g_j(x)$ $\forall j \neq k$
Maximum Value Method

OvO is most powerful and needs most discriminant functions.

MVM does not generate Indeterminate regions. (unless $g_k(x) = g_j(x)$)