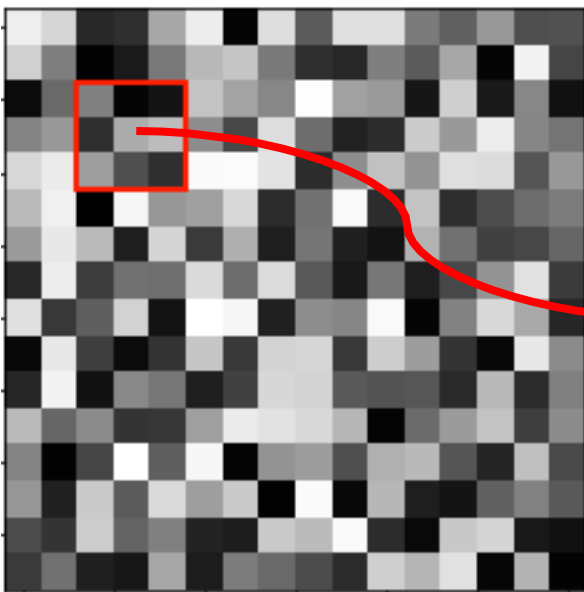
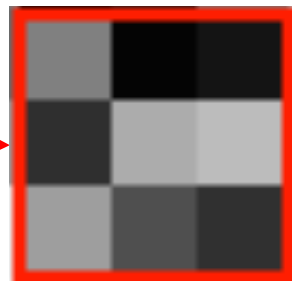


3x3 slidingwindow



512x3x3 feature map



3x3 conv

Output 512

**1x1conv
Object**

Output 9x2

Output 9x4

**1x1conv
Regre.**

Loss:

$$\frac{1}{N_{cls}} \sum_i L_{cls}(p_i, p_i^*)$$

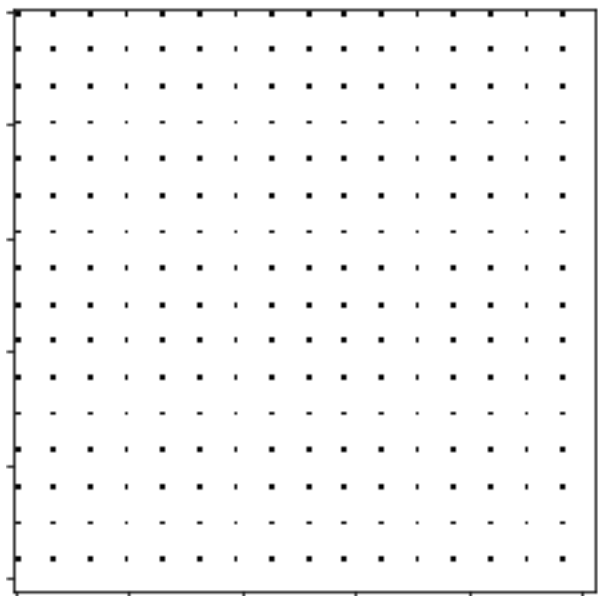
**16x16x9
proposals**

Proposal:
Objectscore
Boundary box coord

Loss:

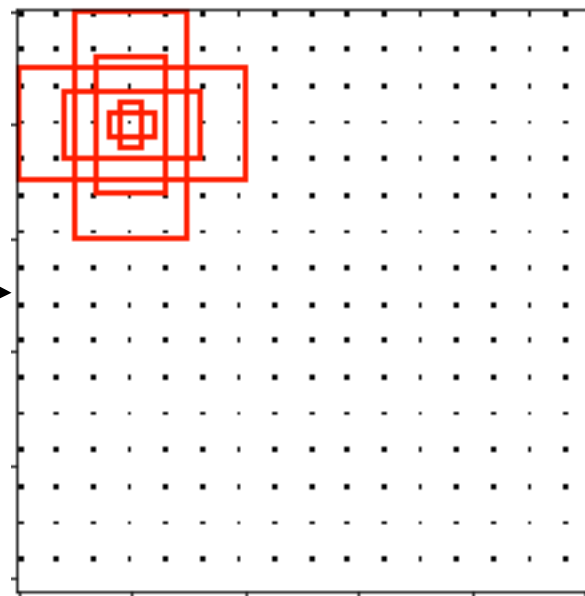
$$\lambda \frac{1}{N_{reg}} \sum_i p_i^* L_{reg}(t_i, t_i^*)$$

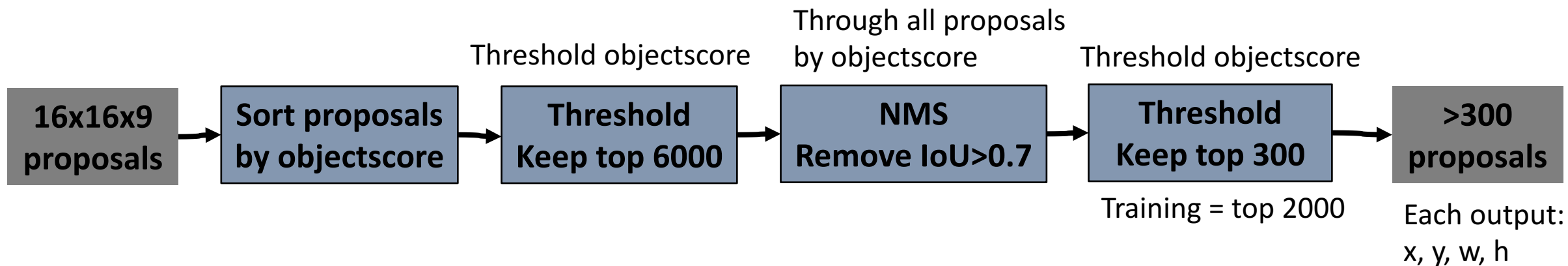
Anchor centers in image

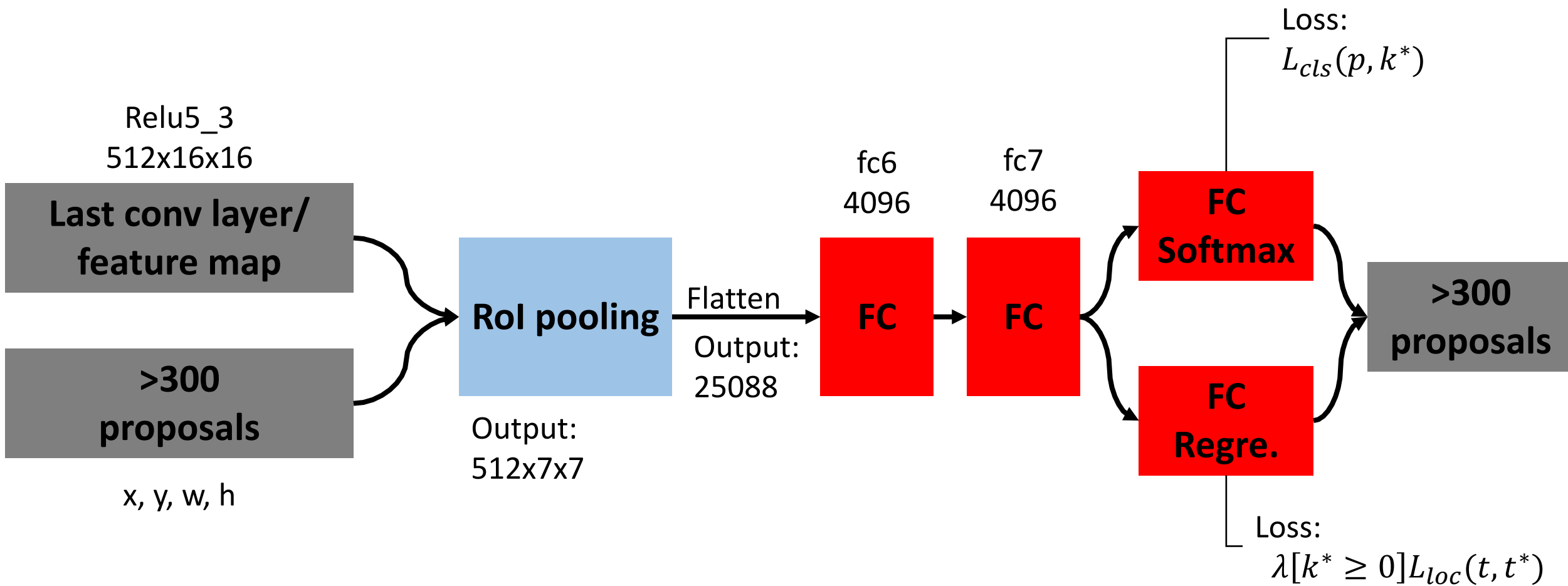


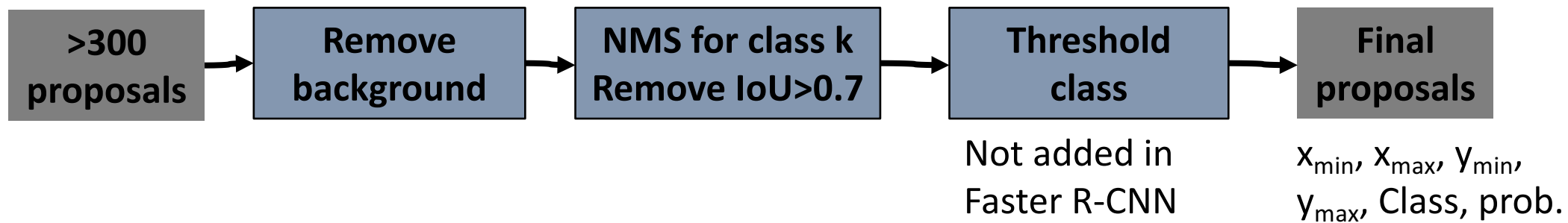
Each anchor=
3 scales
Ex. 10, 30, 50
3 aspect ratios
Ex 1:1, 1:2, 2:1

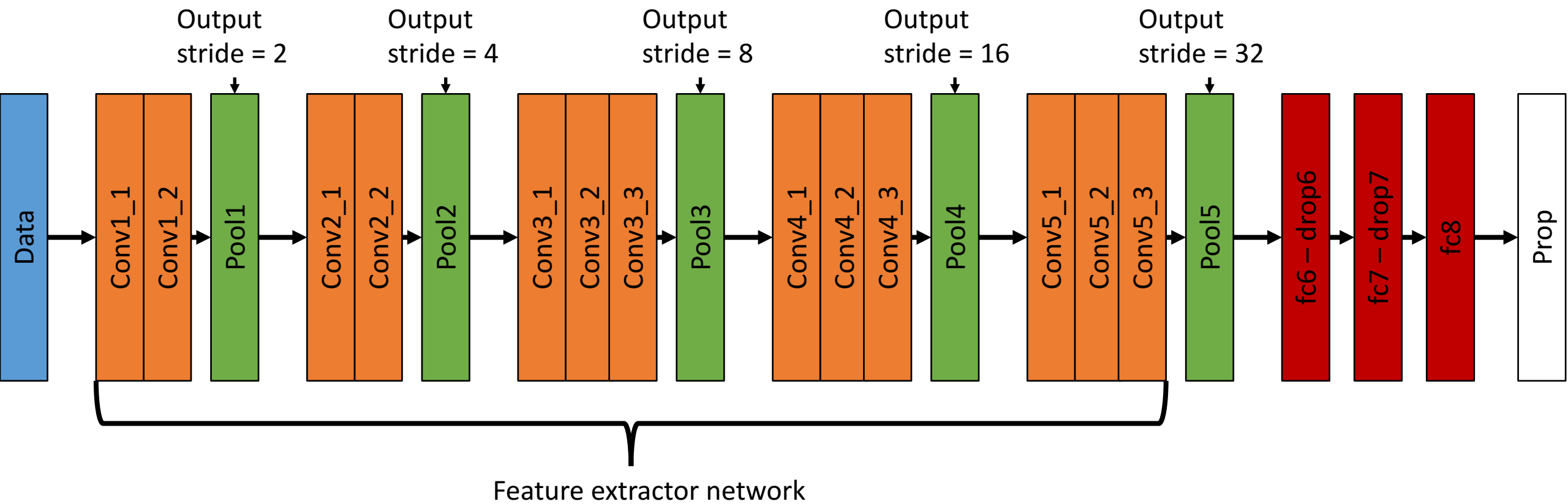
Anchors in image for 1 center

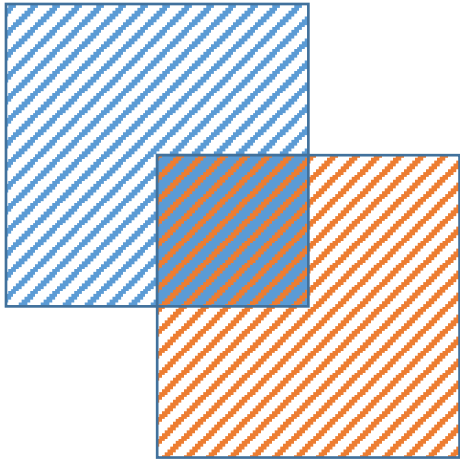




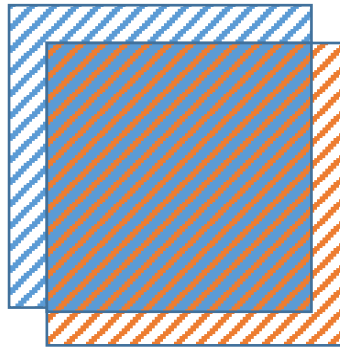




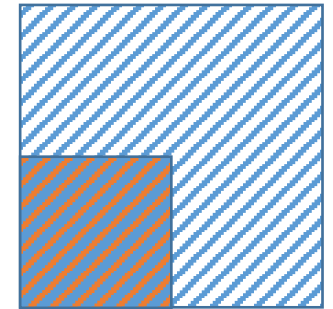




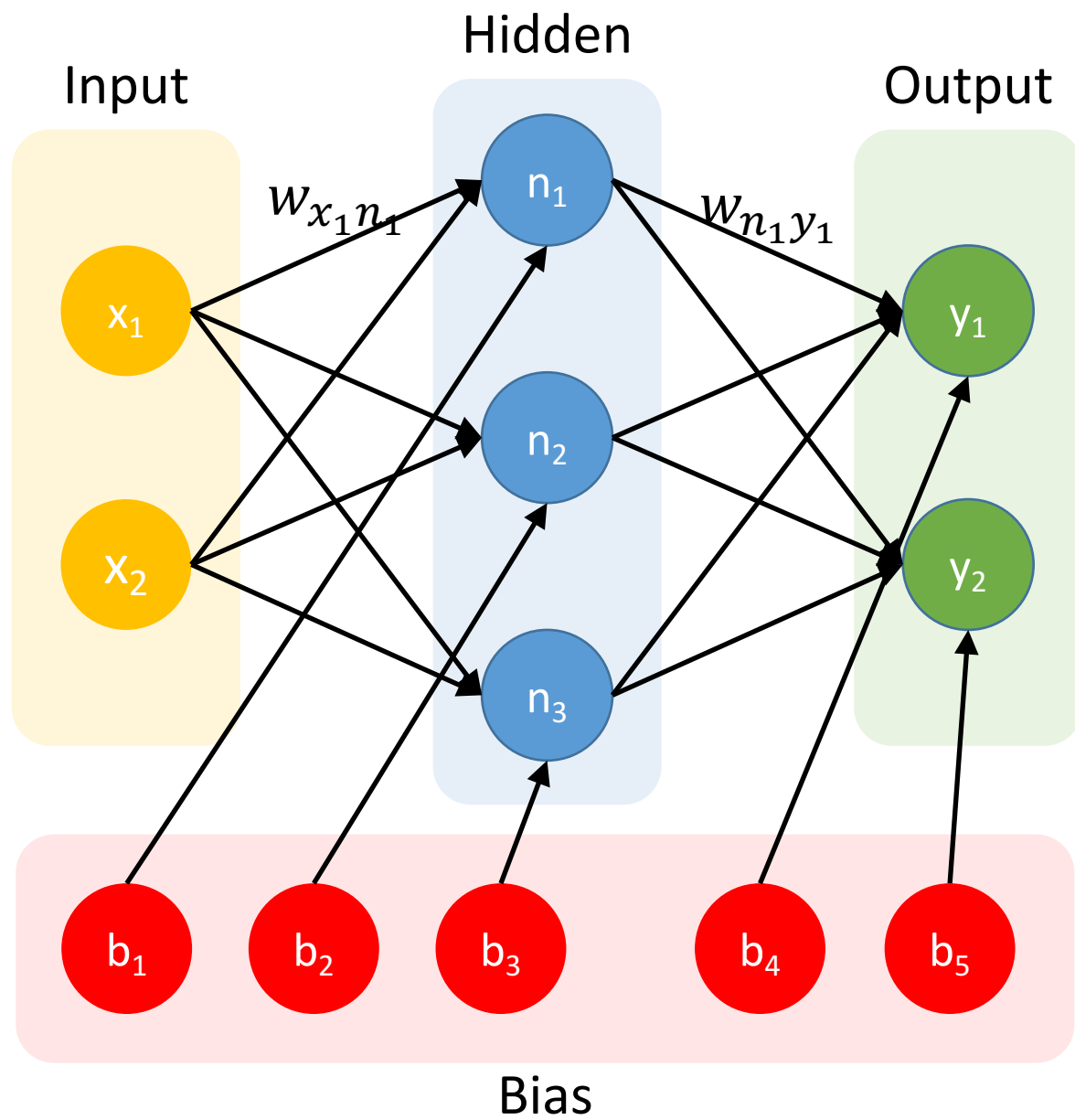
IoU = 0.1429



IoU = 0.6203



IoU = 0.2500



n_1

