



$$w_{14} = -1 \quad w_{15} = 2 \quad w_{24} = 3$$

$$w_{25} = 0 \quad w_{34} = 1 \quad w_{35} = 6$$

$$B_1 = 1 \quad B_2 = -2 \quad w_{46} = 3$$

$$w_{56} = 6 \quad B_3 = -6 \quad T = 1$$

net1

$$\begin{aligned} O_1 &= (I_1 w_{14} + I_2 w_{24} + I_3 w_{34}) + B_1 \\ &= -5 + 9 + 1 - 2 \end{aligned}$$

net2 = 3

$$\begin{aligned} O_2 &= (I_1 w_{15} + I_2 w_{25} + I_3 w_{35}) + B_2 \\ &= 10 + 0 + 6 + 1 \\ &= 17 \end{aligned}$$

$$O_1 = \text{Sigmoid}(\text{net}_1) \\ = \underline{0.95257}$$

$$O_2 = \text{Sigmoid}(\text{net}_2) \\ = \underline{0.9999}$$

$$\text{net}_3 = O_1 W_{46} + O_2 W_{56} + B_3 \\ = (0.9525)(3) + (0.9999)(4) - 6 \\ = \underline{0.8571}$$

$$O_3 = \text{Sigmoid}(0.8571) \\ = \underline{\underline{0.70205}}$$

$$E = \frac{1}{2} (1 - 0.7020)^2 \\ = \underline{\underline{0.0444}}$$