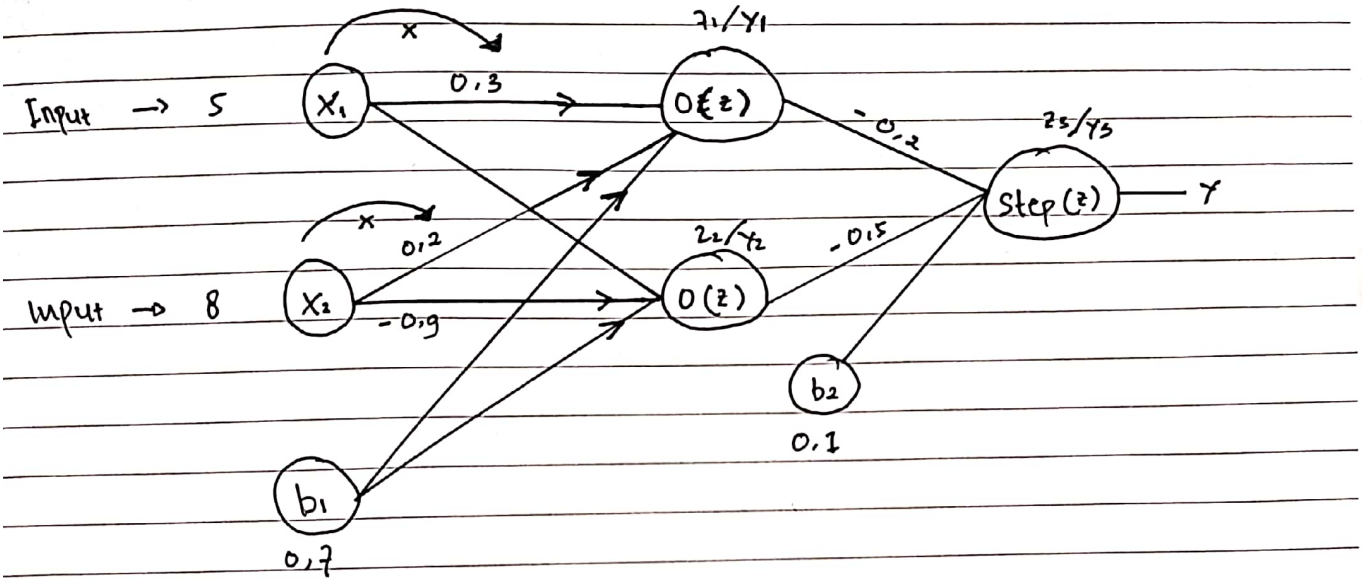
Exercise 1



Penyelesaian

$z_1 = (5)(0,3) + (8)(0,2) + 0,7$
$= 1,5 + 1,6 + 0,7$
$= 3,8$

$z_2 = (8)(0,9) + 0,7$
$= 7,2 + 0,7$
$= 7,9$

$Y_1 = \text{sigmoid}(z)$
$= \frac{1}{1+e^{-3,8}} = 0,978$

$Y_2 = \text{sigmoid}(z)$
$= \frac{1}{1+e^{-7,9}} = 0,999$

$z_3 = (0,978)(-0,2) + (0,999)(-0,5) + 0,1$
$= -0,1956 + (-0,4995) + 0,1$
$= -1,2951 + 0,1$
$= -1,1951$

$z_3 = z \leq 0$
Maka $y_3 = 0$

Data ke	Target	Peramalan	t − Y	(t − Y)²
1	1145	1125	20	400
2	1286	1300	-14	196
3	1867	1879	-12	144
4	1380	1391	-11	121
5	1341	1351	-10	100
6	6138	6153	-15	225
7	8912	3937	-25	625
8	4193	4205	-12	144
9	4841	4868	-27	729
10	2104	2111	-7	49
			TOTAL	2733

$$MSE = \frac{\text{Total}}{\text{banyak data}}$$

$$= \frac{2735}{10}$$

$$= 273,3$$

$$MSE = \frac{1}{n} \cdot \text{total}$$

$$= \frac{1}{10} \cdot 2.733$$

$$= 273,3$$