

## ALTERNATIVA

$$w_1 = 0, w_2 = 1, w_0 = 0, \eta = 1/2$$

### Epoca 1

$$R_1: y = \text{SIGN}(-1) = -1 \text{ OK}$$

$$R_2: y = \text{SIGN}(1) = 1 \neq -1$$

$$w_0 = 0 + \frac{1}{2}(-1) \cdot 1 = -1/2$$

$$w_1 = 0 + \frac{1}{2}(-1) \cdot -1 = 1/2$$

$$w_2 = 1 + \frac{1}{2}(-1) \cdot 1 = 3/2$$

$$R_3: y = \text{SIGN}(+3/2) = +1 \neq -1$$

$$w_0 = -1/2 + \frac{1}{2}(-1) \cdot 1 = -1$$

$$w_1 = 1/2 + \frac{1}{2}(-1) \cdot 1 = 0$$

$$w_2 = -3/2 + \frac{1}{2}(-1) \cdot -1 = -1$$

$$R_4: y = \text{SIGN}(-2) = -1 \neq 1$$

$$w_0 = -1 + \frac{1}{2}(1) \cdot 1 = -1/2$$

$$w_1 = 0 + \frac{1}{2}(1) \cdot 1 = 1/2$$

$$w_2 = -1 + \frac{1}{2}(1) \cdot 1 = -1/2$$

### Epoca 2

$$R_1: y = \text{SIGN}(-1/2) = -1 \text{ OK}$$

$$R_2: y = \text{SIGN}(-3/2) = -1 \text{ OK}$$

$$R_3: y = \text{SIGN}(1/2) = 1 \neq -1$$

$$w_0 = -1/2 + 1/2 \cdot (-1) \cdot 1 = -1$$

$$w_1 = 1/2 + 1/2 \cdot (-1) \cdot 1 = 0$$

$$w_2 = -1/2 + 1/2 \cdot (-1) \cdot -1 = 0$$

$$R_4: y = \text{SIGN}(-1) = -1 \neq 1$$

$$w_0 = -1 + \frac{1}{2}(1) \cdot 1 = -1/2$$

$$w_1 = 0 + \frac{1}{2}(1) \cdot -1 = -1/2$$

$$w_2 = 0 + \frac{1}{2}(1) \cdot -1 = -1/2$$

$x_1$	$x_2$	$t$
-1	-1	-1
-1	1	-1
1	-1	-1
1	1	1

Exercice 3

$$R_1: y = \text{SIGN}(-3/2) = -1 \text{ OK}$$

$$R_2: y = \text{SIGN}(-1/2) = -1 \text{ OK}$$

$$R_3: y = \text{SIGN}(-1/2) = -1 \text{ OK}$$

$$R_4: y = \text{SIGN}(1/2) = 1 \text{ OK}$$