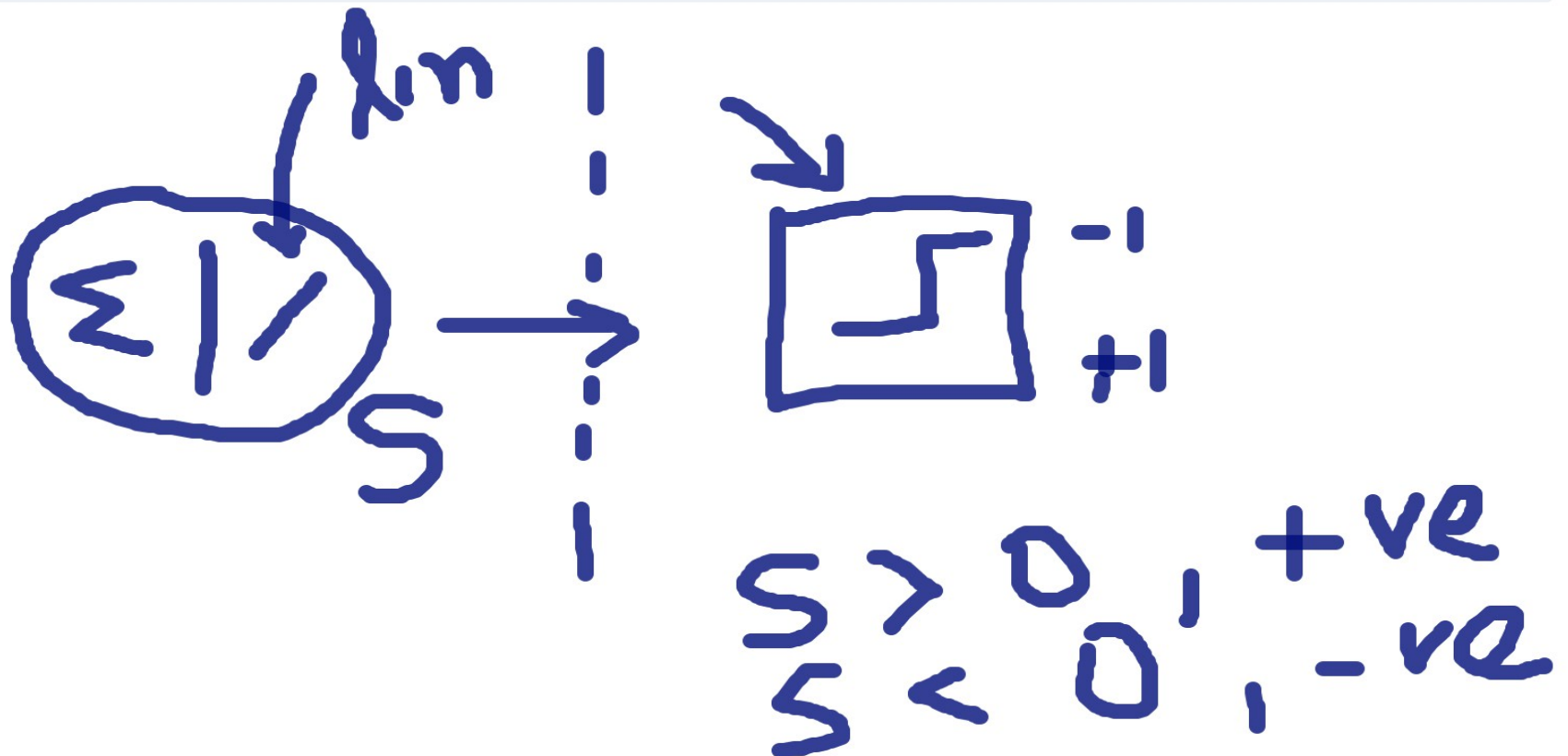




# Day3: Putting it to use

- We will start with a very simple example
- Arbitrary classification



- $DE/dW_i =$

$$F_{\text{error}}$$

$$= -2 \cdot 2y \cdot 1 \cdot x_i$$

$$= -2 \cdot 2y_i \cdot 1 \cdot x_i$$

$$= -4y_i x_i$$

$$= \eta \cdot 4y_i x_i$$

$$\Delta w_i = -\eta \frac{\partial E}{\partial w_i} = -\eta \cdot -4y_i x_i$$

# Perceptron trg

- $\Delta W_i = \eta * Y_i * X_i$
- Sumproduct \* target class value  $\leq 0$ , errored cases

Combining multiple neurons to solve  
complex problems