

Exercise 12.2.1 C.) Continued

$w \cdot e = 0$, not positive.

$$w' = w + (0.5)(+1)e = [0, 1, 0, -0.5, 0, 0] + [0.5, 0, 0.5, 0, 0.5, -0.5] = [0.5, 1, 0.5, -0.5, 0.5, -0.5]$$

$w \cdot f = 1$, not negative

$$w' = w + (0.5)(-1)f = [0.5, 1, 0.5, -0.5, 0.5, -0.5] - [0.5, 0, 0.5, 0.5, 0, -0.5] = [0, 1, 0, -1, 0.5, 0]$$

Converged to perceptron $w = [0, 1, 0, -1, 0.5, 0]$