(a): $z_1 = 0\times 2.5 + 1\times 1 + 1\times 1.5 = 2.5$

$g(z_1) = \frac{1}{1+e^{-2.5}} \approx 0.9241$

$z_2 = 0\times(-1.5) + 1\times(-3) + 1\times 2 = -1$

$g(z_2) = \frac{1}{1+e} = 0.2689$

$\hat{y} = -1 + 0.9241 + 0.5\times 0.2689 = 0.0586$

$g(\hat{y}) = 0.5146$

(b) $E' = y - o = 1 - 0.5146 = 0.4854$

$\Delta w_{hb} = 0.1\times 1\times 0.4854\times 0.5146\times 0.4854 = 0.0121$

$\Delta w_{h_1} = 0.1\times 0.9241\times 0.4854\times 0.5146\times 0.4854 = 0.0112$

$\Delta w_{h_2} = 0.1\times 0.2689\times 0.4854\times 0.5146\times 0.4854 = 0.0033$

$\Delta w_{h_1 b} = 0.1\times 1\times 0.9241\times 0.0759\times 1\times 0.4854\times 0.5146\times 0.4854 = 0.000849$

$\Delta w_{h_1 x_1} = 0.1\times 0\times 0.9241\times 0.0759\times 1\times 0.4854\times 0.5146\times 0.4854 = 0$

$\Delta w_{h_1 x_2} = 0.1\times 1\times 0.9241\times 0.0759\times 1\times 0.4854\times 0.5146\times 0.4854 = 0.000849$

$\Delta w_{h_2 b} = 0.1\times 1\times 0.2689\times 0.7311\times 0.5\times 0.4854\times 0.5146\times 0.4854 = 0.00119$

$\Delta w_{h_2 x_1} = 0.1\times 0\times 0.2689\times 0.7311\times 0.5\times 0.4854\times 0.5146\times 0.4854 = 0$

$\Delta w_{h_2 x_2} = 0.1\times 1\times 0.2689\times 0.7311\times 0.5\times 0.4854\times 0.5146\times 0.4854 = 0.00119$

$w_{yb} = w_{yb} + \Delta w_{yb} = -0.9879$

$w_{yh_1} = w_{yh_1} + \Delta w_{yh_1} = 1.0112$

$w_{yh_2} = w_{yh_2} + \Delta w_{yh_2} = 0.5033$

$w_{h_1 b} = w_{h_1 b} + \Delta w_{h_1 b} = 1.500849$

$w_{h_1 x_1} = w_{h_1 x_1} + \Delta w_{h_1 x_1} = 2.5$

$w_{h_1 x_2} = w_{h_1 x_2} + \Delta w_{h_1 x_2} = 1.000849$

$w_{h_2 b} = w_{h_2 b} + \Delta w_{h_2 b} = 2.00119$

$w_{h_2 x_1} = w_{h_2 x_1} + \Delta w_{h_2 x_1} = -1.5$

$w_{h_2 x_2} = w_{h_2 x_2} + \Delta w_{h_2 x_2} = -2.99881$