

**** Resolva este exercício e entregue no prazo especificado no ambiente *moodle* (aprender3.unb.br). Faça com caneta escura, fotografe ou digitalize, e envie em formato .jpg ou .pdf no *moodle*.**

1. Do livro “Machine Learning”, Tom Mitchell, 1997.

4.7. Consider a two-layer feedforward ANN with two inputs a and b , one hidden unit c , and one output unit d . This network has five weights (w_{ca} , w_{cb} , w_{c0} , w_{dc} , w_{d0}), where w_{x0} represents the threshold weight for unit x . Initialize these weights to the values (.1, .1, .1, .1, .1), then give their values after each of the first two training iterations of the BACKPROPAGATION algorithm. Assume learning rate $\eta = .3$, momentum $\alpha = 0.9$, incremental weight updates, and the following training examples:

a	b	d
1	0	1
0	1	0