Assignment8: Regression and Neural Networks

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Exercise 8.1 (XOR Neural Network)

1. Assume $b_3 = b_4 = b_5 = 0$ and inputs $a_1 = a_2 = 1$. What are the resulting activations a_3, a_4, and a_5?

   $a_3 = 1, a_4 = 0, a_5 = 1$

2. Choose appropriate values for b_3, b_4, and b_5 such that the network implements the XOR function.

   $b_3 = 0, b_4 = -2, b_5 = 1$