

Logistic Regression

LATEST SUBMISSION GRADE

100%

1. Suppose that you have trained a logistic regression classifier, and it outputs on a new example x a prediction $h_{\theta}(x) = 0.2$. This means (check all that apply):

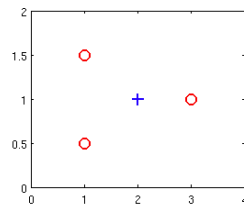
1 / 1 point

✓ Correct

2. Suppose you have the following training set, and fit a logistic regression classifier $h_{\theta}(x) = g(\theta_0 + \theta_1 x_1 + \theta_2 x_2)$.

1 / 1 point

x_1	x_2	y
1	0.5	0
1	1.5	0
2	1	1
3	1	0



Which of the following are true? Check all that apply.

✓ Correct

3. For logistic regression, the gradient is given by $\frac{\partial}{\partial \theta_j} J(\theta) = \frac{1}{m} \sum_{i=1}^m (h_{\theta}(x^{(i)}) - y^{(i)}) x_j^{(i)}$. Which of these is a correct gradient descent update for logistic regression with a learning rate of α ? Check all that apply.

1 / 1 point

✓ Correct

4. Which of the following statements are true? Check all that apply.

1 / 1 point

✓ Correct

5. Suppose you train a logistic classifier $h_{\theta}(x) = g(\theta_0 + \theta_1 x_1 + \theta_2 x_2)$. Suppose $\theta_0 = 6, \theta_1 = -1, \theta_2 = 0$. Which of the following figures represents the decision boundary found by your classifier?

1 / 1 point

✓ Correct