

# Answers to Review Quiz 6

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Question 1: Which of the following regarding Support Vector Machine (SVM) and Logistic Regression are true?

1. The difference between Soft margin and Hard margin is that hard margin allows some mis-classification on some data points. **soft margin**
2. SVM finds its optimal model parameters by maximizing the margin between the decision boundary and the observed data.
3. Logistic Regression finds its optimal model parameters by the minimizing the sum of distance among the observed data. **maximizing**

- A. Only 1
- B. Only 2**
- C. Only 3
- D. 1 and 2
- E. 2 and 3

Question 2: What are support vectors?

Answer: Support vectors are data points that near to the hyperplane. They lie on the boundary of the margins.

Question 3: What is the margin in a SVM?

Answer: Margin in a SVM is the distance between nearest data points that from each class.



The winner is  
ZiXiao Zhang

High five from your instructor  
Dr. Pang to ZiXiao Zhang for a  
great answers in Review Quiz  
#6 on 4/21/2021