

MACHINE LEARNING – WORKSHEET-1

ANSWERSHEET

1. B
2. C
3. B
4. C
5. D
6. B
7. C
8. B
9. A, B, D
10. A, D
11. C, D

SUBJECTIVE ANSWER

Answer 12:

All Gradient Descent Linear Regression training algorithm can we use if we have a training set with millions of features. Gradient Descent Linear Regression are:

- Stochastic Gradient Descent (SGD)
- Batch Gradient Descent (BGD)
- Mini-Batch Gradient Descent (MBGD)

Because neither of them needs to load the entire dataset into memory in order to take 1 step of gradient descent.

The normal equations method would not be a good choice because it is computationally inefficient. The main cause of the computational complexity comes from inverse operation on an $(n \times n)$ matrix.

Answer 13:

The Gradient Descent suffers from features of different scales, because the model will take a longer time to reach the global maximum. We can always scale the features to eliminate this problem.
