

1.5 Classifying Data and Matrix Multiplication

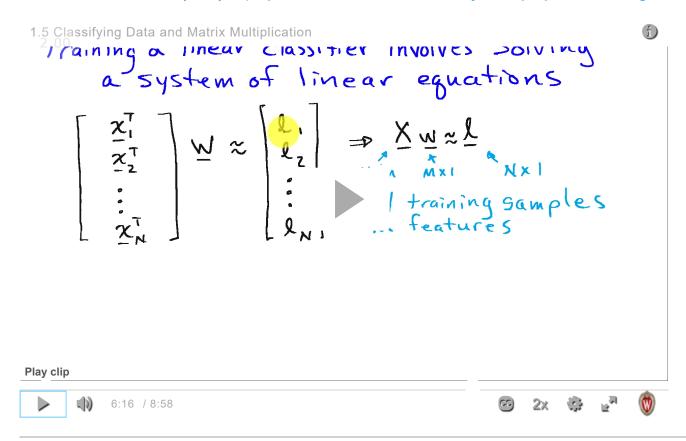
Started: Jan 27 at 10:11am

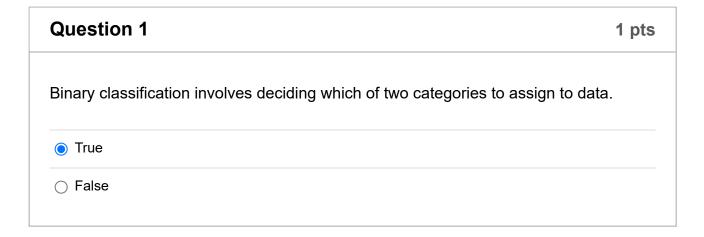
Quiz Instructions

View the Video Lecture and then complete the short quiz.

Transcript (PDF) (https://uwmadison.box.com/s/wn065015pt0ff71c6s1o74pgg4pnojh7)

<u>Video Lecture Slides (PDF) (https://uwmadison.box.com/s/72y0z63rqbrqcd2222amnei9g0xrmep9b)</u>





Question 2 1 pts

Select all that apply.

Let \mathbf{x} be a K-by-1 feature vector and \mathbf{w} be a K-by-1 set of weights. Which of the following represent decision boundaries for linear classifiers?

- $\mathbf{v}^T \mathbf{w} = 0$
- $\square \mathbf{w}^T \mathbf{x} = 0$

Question 3 1 pts

What is necessary to use supervised learning for training a linear classifier?

- iocane powder
- o a set of features with known labels
- fewer features than labels
- O fewer training samples than classifier weights
- \bigcirc at least 10 weights

Question 4 1 pts

Let \boldsymbol{x} be a be a vector that is a function of the features. A binary classifier written in the form $\operatorname{sign}(\boldsymbol{x}^T\boldsymbol{w})$ cannot have a curved decision boundary in the feature space.	
○ True⑥ False	

Question 5	1 pts
An error in a classification problem is called a	
○ false start	
○ false hypothesis	
misclassification	
○ inconceivable	

Quiz saved at 10:24am

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