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2. Review of Basic Concepts

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Exercises due Feb 15, 2023 08:59 -03 Completed

Review of Basic Concepts



Video

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$[[A]]$ either takes value **1** or **0** depending on whether **A** is True or False. For example, $[[1 = 1]] = 1$, and $[[1 \neq 3]] = 0$

Concept Review Problem: car accident prediction 1

1/1 point (graded)

In this problem, we will put ourselves in the shoes of a car insurance company. Our goal is to predict whether our customers were involved in an accident on July 4th, 1998.

For **8** customers, we know the following information:

1. number of accidents the customer made in the past.
2. number of miles the customer has driven.

	number of past accidents	miles customer drove so far	customer
customer 1	0	2710.9	
customer 2	2	13209.2	
customer 3	1	89001.4	
customer 4	3	12381.1	
customer 5	0	1893.5	
customer 6	2	32493.5	
customer 7	1	5443.5	
customer 8	0	4493.5	

What is the dimension of each feature vector?



Submit

You have used 1 of 3 attempts

Concept Review Problem: car accident prediction 3

1/1 point (graded)

How many feature vectors are there in the above table?



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You have used 1 of 3 attempts

Concept Review Problem: Classifier and Training Error 1

1/1 point (graded)

Assume we have training data and a classifier like the following: (where \mathbf{x} denotes the classifier with the data point as input)

denotes

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You have used 1 of 3 attempts

Concept Review Problem: Classifier and Training Error 2

1/1 point (graded)

Now let's examine the training error in a general sense. is a function of:



, the number of training data



, the classifier



the number of test data

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