Nanoquiz Week 1

The questions below are due on Thursday February 15, 2018; 09:50:00 AM.

Nanoquiz Instructions

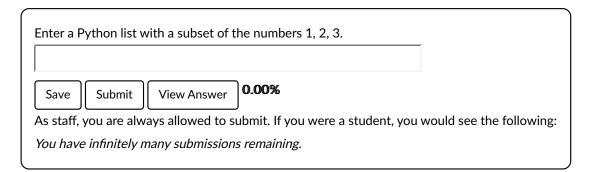
Nanoquizzes are just like any other tutor exercise, except that they are timed, and that some questions allow a limited number of submissions. When the timer hits zero, you will be prevented from making any further submissions to the nanoquiz, and the answers will be displayed, so **please make sure you have submitted something before that occurs**.

Note that you are free to use any materials you want (electronic or otherwise, including notes, calculators, Python, and Wikipedia) during the nanoquiz, but you are **not** allowed to converse with other humans (including through text message, email, etc).

1) POSITIVE

Consider a linear classifier through the origin in 2 dimensions, specified by $\theta = [3, -4]^T$. Which of the following points are classified as positive?

- 1. $[1, -1]^T$
- 2. $[1, 1]^T$
- 3. $[-1, -1]^T$



2) DISTANCES

For the same θ and the points given in the previous question give the signed distances from the points to the hyperplane.

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Enter a Python list of 3 floats, you can enter Python numerical expressions for the values, e.g. [3/4, 26, 3*0.5]

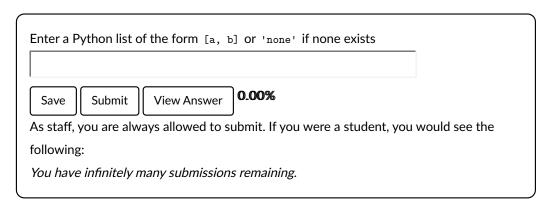
Save Submit View Answer 0.00%

As staff, you are always allowed to submit. If you were a student, you would see the following: You have infinitely many submissions remaining.

3) SEPARABLE

Consider the following data set of four 2D points (a 2 by 4 array) and corresponding labels (1 by 4 array): X=[[2,2,1,3],[2,1,2,3]],y=[[+1,-1,-1,+1]].

1. Enter the components of θ for a separator through the origin (no offset) for this data set.



2. Enter the components of θ followed by θ_0 for a separator (with offset).

