

Q1
1 Point

Numpy has two types of 1D arrays: column vectors and row vectors.

True
False

Q2
1 Point

What is the result of the following code?

```
a = [1, 2]
b = [3, 4]
print(a + b)
```

[1, 2, 3, 4]
[4, 6]
11

Q3
1 Point

Select all the reasons that dimensionality reduction may be helpful:

- ✓ Noise reduction via reconstruction
- ✓ Visualization
- ✓ Lower computational costs

Q4

1 Point

It is okay to share your assignment code with someone else as long as you completed the assignment yourself.

True

False

Q5

1 Point

What time are assignments due?

11:59 AM (noon)

11:59 PM (midnight)

Q6

1 Point

If you have a question about the assignment, what should you do?

Email the professor

Email the TA

Post your question on Piazza

Q7

1 Point

What was the main strength(s) of the first wave of AI called "Handcrafted Knowledge" according to DARPA's perspective (e.g. chess, TurboTax, rule-based scheduling systems)? Select all that apply.

Perceiving

Abstracting

✓ Reasoning

Learning

Q8

1 Point

Assuming that A, B, C, D are 3×3 matrices, which of the following statements are ALWAYS true? Select all that apply.

$$A(B + C) = AB + CA$$

$$C(A + B) = CA + BA$$

$$(AB)^T = A^T B^T$$

$$✓ \quad ABC + ABD = (AB)(C + D)$$

Q9

1 Point

What is the inner product of $\mathbf{x} = [1, 2, 4]^T$ and $\mathbf{y} = [10, 5, 1]^T$?

24

[10, 10, 4]

$$\begin{bmatrix} 10 & 5 & 1 \\ 20 & 10 & 2 \\ 40 & 20 & 4 \end{bmatrix}$$

Answer

24

Q10 Instructions
1 Point

Time limit: This is a timed quiz. There will usually be roughly 10-12 questions including this policy question and you will usually have about 1 minute per question.

Open notes: The quiz is open notes. You are free to use any content from the course website or from your own personal notes.

No communication: ANY communication with other students about the quiz content is strictly forbidden and will result in a failing grade for the whole class (not just this quiz).

No partial credit: Every question is all or nothing credit. Thus, you must get the answer exactly right to get credit for the question (including SELECT ALL questions). No partial credit will be given on quizzes.

Number Format: When giving numbers as short answers, please give in standard decimal notation with preceding "0." for decimals if needed but no trailing 0s (e.g., "0.15", "2.9", "0.001", "100" but NOT "0.15000" NOR ".15" NOR ".001" NOR "6.0").

Honor Pledge: I assert that I have not received any information about this quiz and will not share any quiz content with anyone else. I understand that any violation of this will result in a failing grade for the whole class (not just this quiz).

Yes, I understand the policies above and assert the honor pledge.

No

Q11
1 Point

If you miss a quiz or exam, you will be able to get partial credit (20% penalty) if you make it up within one day.

True

False

Quiz 1	● Graded
Student	
Paloma Arellano	
Total Points	
9 / 11 pts	
Question 1	
(no title)	0 / 1 pt
Question 2	
(no title)	1 / 1 pt
Question 3	
(no title)	1 / 1 pt
Question 4	
(no title)	1 / 1 pt
Question 5	
(no title)	1 / 1 pt
Question 6	
(no title)	1 / 1 pt
Question 7	
(no title)	1 / 1 pt
Question 8	
(no title)	1 / 1 pt
Question 9	
(no title)	0 / 1 pt

+ 1 pt Correct

✓ + 0 pts Incorrect

Question 10
Instructions

1 / 1 pt

Question 11
(no title)

1 / 1 pt