CS 132 Quiz 3B (Group)

Gordon Ng

TOTAL POINTS

10 / 11

QUESTION 1

13/3

√ - 0 pts Correct

- 1 pts Didn't show work using determinant
- 1 pts Didn't recognize correct matrix
- 1 pts Didn't give the correct answer
- 3 pts Missing

QUESTION 2

2 4/5

- 0 pts Correct
- 1 pts Part A Incorrect
- 1 pts Part B Incorrect

√ - 1 pts Part C Incorrect

- 1 pts Part D Incorrect
- 1 pts Part E Incorrect
- 5 pts Missing

QUESTION 3

3 2/2

√ - 0 pts Correct

- 2 pts Incorrect
- 1 pts Didn't state that determinant of matrix is

nonzero

- 1 pts Stated determinant is nonzero, but gave

incorrect answer

QUESTION 4

4 1/1

√ - 0 pts Correct

- 0.5 pts Wrong explanation but correct boolean

answer

- 1 pts Incorrect

Boston University CS132 Quiz 3, Version B

Answer the questions in the spaces provided.

There are four questions and two pages for this quiz.

(First Name, Last Name): Glord on Ng BU ID: U8	274481	6
1. (3 points) Find the volume of the parallelepiped with one vertex at the origin		s latig for
(1, 0, -3), (1, 2, 4), (5, 1, 0).		R
[(-1) (-1) (40]	0 - 4	14/17-79
1021 -B40 (4)3.0 [40]		
(-1) -3 [2.57]		
		A A A
(-4) 1-3 (-g)	1 - 10	70 9
123)	(SALVIAN)	

- 2. (5 points) Let **A** and **B** be 4×4 matrices, with det **A** = -3 and det **B** = -1. Use properties of determinants to compute:
 - (a) det AB

7

(b) $\det \mathbf{B}^5$

(-I) 3

4-1

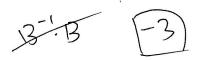
(c) det 2A

4 - Gatom illihar in a to make

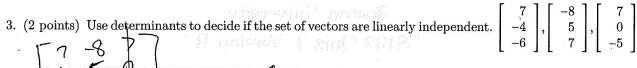
(d) det $\mathbf{A}^T \mathbf{B} \mathbf{A}$

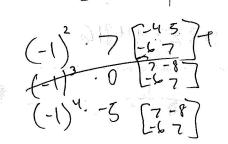
(-3(1-1)(-3)

(e) det $\mathbf{B}^{-1}\mathbf{A}\mathbf{B}$









1: Mask set of noutrons of length n is linearly independent if the matrix with these vedors as columns has a non-zero determinant-

7(2) + 97(-5)
$$\neq$$
 8
4. (1 point) (BONUS) - 485 \neq 477+

The maximum you can receive on the quiz including the bonus question is 100%. The mark will not exceed more than 100%.

Say whether the following sets of matrices form a subspace of the set of all matrices (under ordinary matrix addition and multiplication by scalars); give a counter-example (something that violates the rules for subspaces) for cases that are not a subspace.

(a) invertible matrices

Adding two invertible matrixes, the end result is not in withle