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Unit 6 - Week 4

Course outline

How does an NPTEL online course work?

Week 0 - Welcome to the course!

Week 1

Week 2

Week 3

Week 4

Lecture 19 : Determinants and their Properties I (unit? unit=32&lesson=39)

Lecture 20 : Determinants and their Properties II (unit? unit=32&lesson=40)

Assignment 4 - Objective

The due date for submitting this assignment has passed. **Due on 2020-03-25, 23:59 IST.**
As per our records you have not submitted this assignment.

1) Consider the square matrix in block form,

1 point

$$A = \begin{bmatrix} B & C \\ O & E \end{bmatrix},$$

where B, C, O, E are all square matrices of the same order. Then

- $\det A = \det B \times \det E$
- $\det A = \det B \det C - \det E$
- $\det A = 0$
- None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

$\det A = \det B \times \det E$

2) A square matrix A is said to be skew symmetric if $A^T = -A$. State whether True or False. **1 point**
If A is skew symmetric, then $\det A = 0$.

- True
- False

No, the answer is incorrect.

Score: 0

Accepted Answers:

- Lecture 21 :
Determinants
and their
Properties III
(unit?
unit=32&lesson=41)
- Weekly
Feedback (unit?
unit=32&lesson=77)
- Download
Videos (unit?
unit=32&lesson=85)
- Quiz :
**Assignment 4 -
Objective**
(assessment?
name=92)

Week 5

Week 6

Week 7

Week 8

True

3) State whether True or False. **1 point**

Every square matrix can be written as a sum of a symmetric and a skew symmetric matrix, but possibly not uniquely.

- True
 False

No, the answer is incorrect.

Score: 0

Accepted Answers:

False

4) State whether True or False. **0 points**

The determinant of an even ordered skew symmetric matrix must be zero.

- True
 False

No, the answer is incorrect.

Score: 0

Accepted Answers:

False

5) State whether True or False. **1 point**

If the determinant of an order 2 square matrix is zero, then the matrix is diagonal.

- True
 False

No, the answer is incorrect.

Score: 0

Accepted Answers:

False