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| Puneet Sir and Shrenik Jain |
| **Linear Algebra Practice** |
| PYQ’s |

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| VARUN KUMAR |

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# **Puneet Sir – Self Question**

# **Shrenik Jain Sir – PYQ’s Practice**

## Lecture 01

Ink Drawings
The rank of the matrix ﷐﷐﷐𝟓﷮𝟎﷮𝟎﷮𝟐﷯﷮﷐−𝟓﷮𝟎﷮𝟎﷮𝟏﷯﷮﷐−𝟓﷮𝟎﷮𝟎﷮𝟏﷯﷮﷐𝟓﷮𝟎﷮𝟎﷮𝟐﷯﷯﷯ is
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If A is a square matrix then orthogonally property mandates
AAT = A-1
AAT = A2
AAT = 0
AAT = I
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Consider a nxn matrix A and a non-zero nx1 vector P. Their product AP = ﷐𝜶﷮𝟐﷯P, Where 𝜶 ∈ ℝ and . Based on given information, the Eigen Value of A2 is:
𝜶
﷐𝜶﷮𝟐﷯
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[GATE 2021 | ME]
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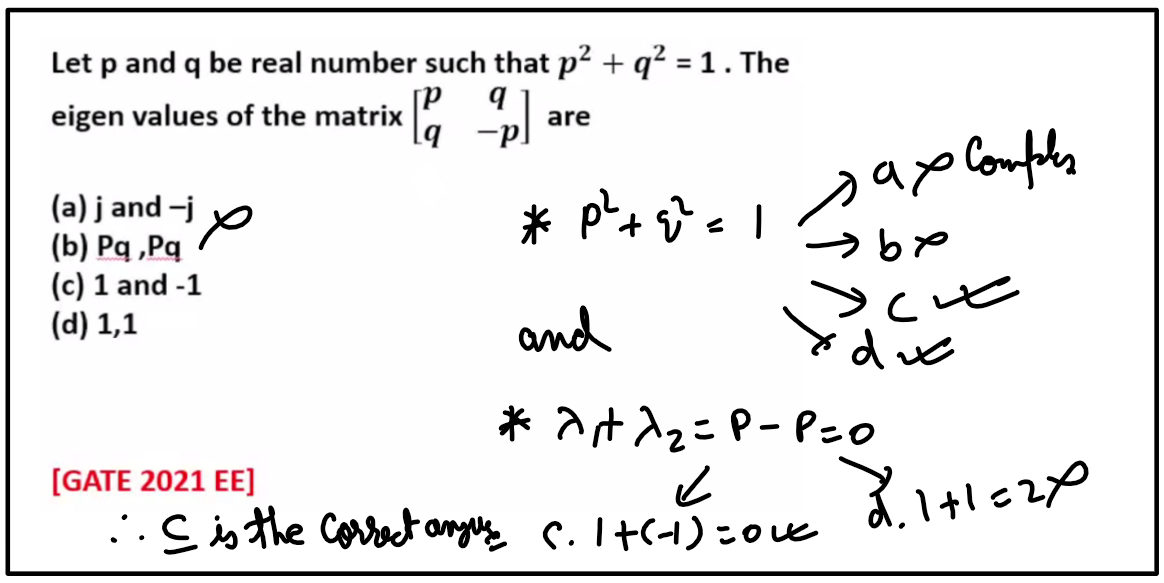

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If P = ﷐﷐1﷮2﷮3﷮4﷯﷯ and Q = ﷐﷐0﷮1﷮1﷮0﷯﷯  then QT PT is

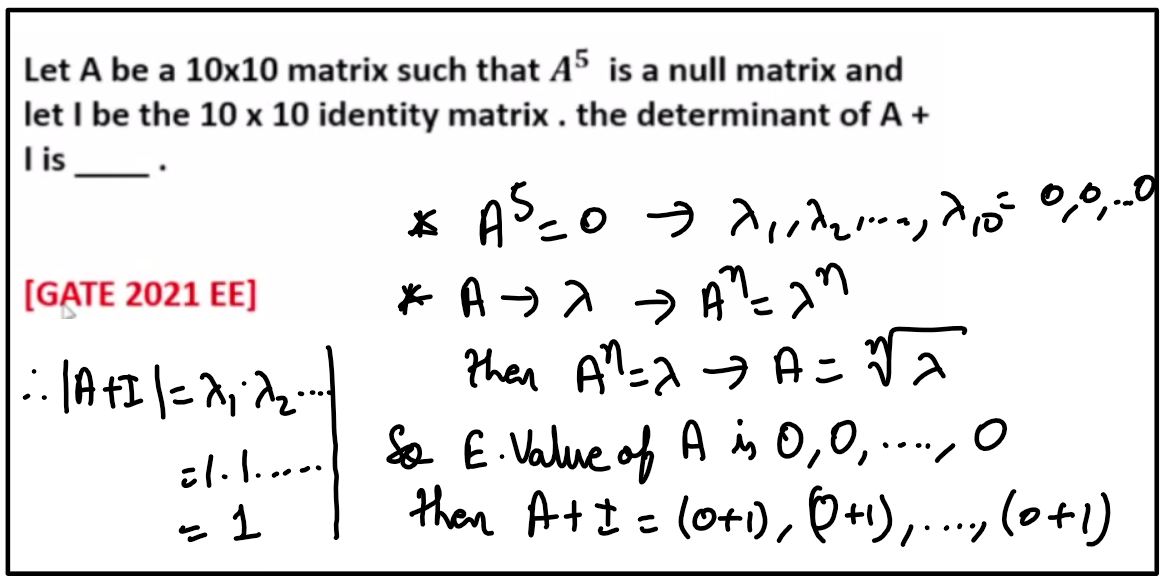
﷐﷐1﷮2﷮3﷮4﷯﷯ 

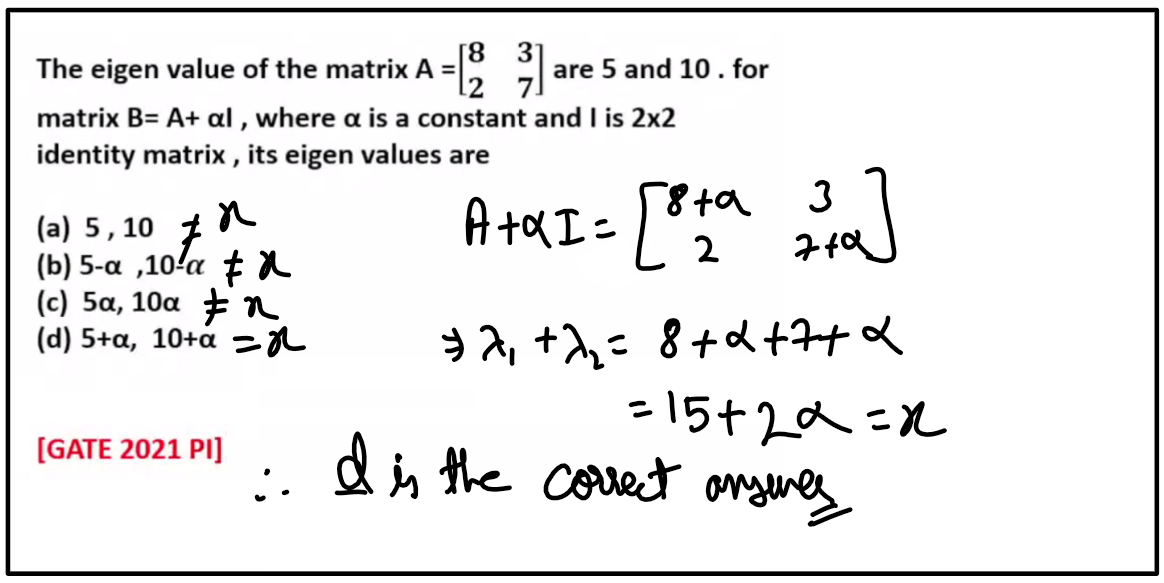
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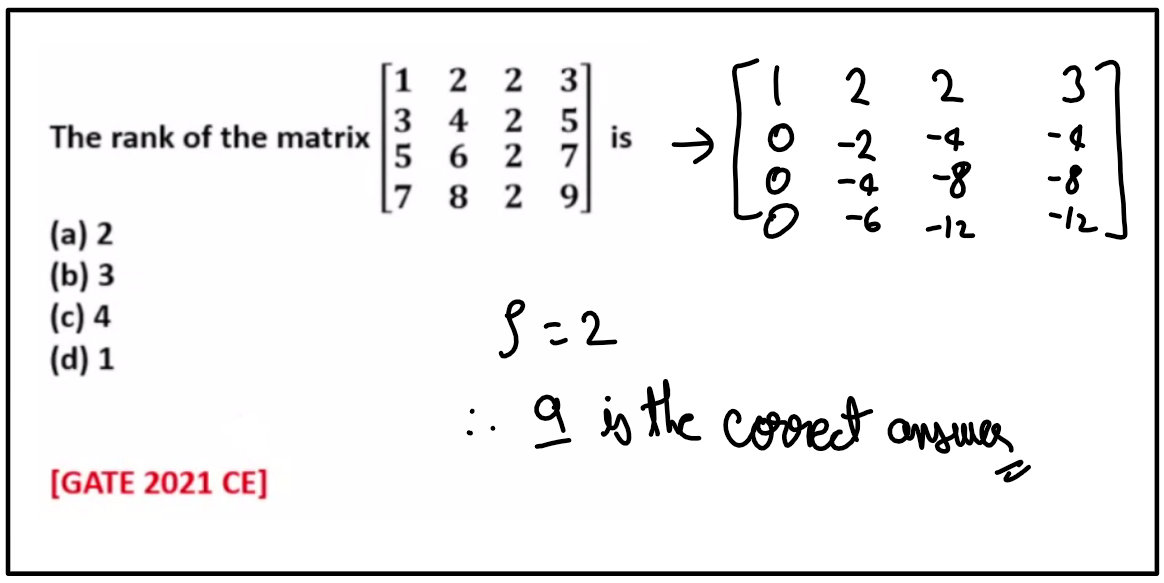
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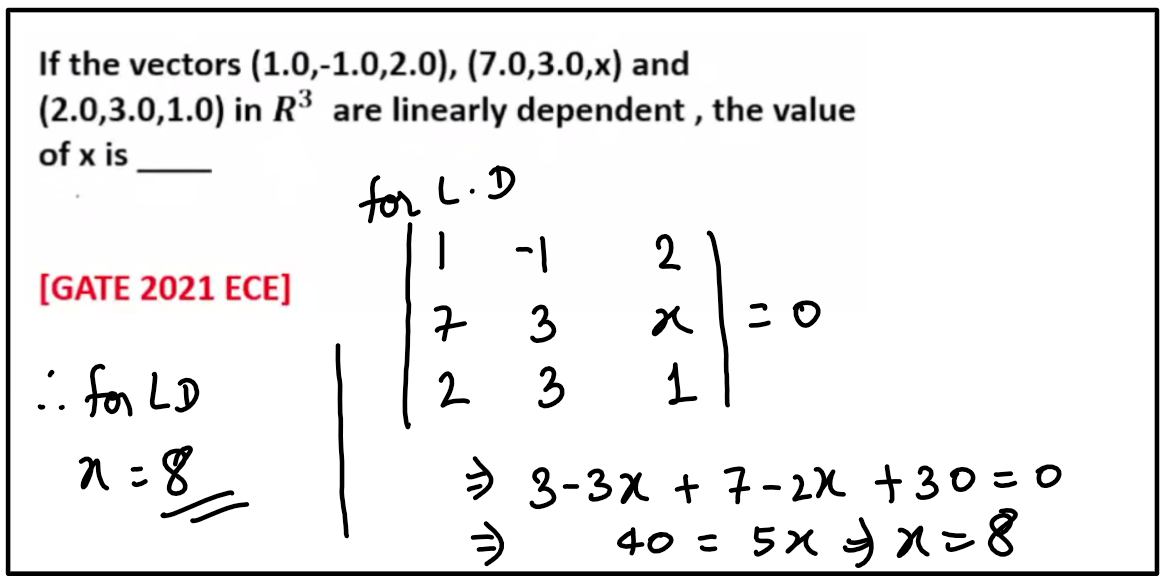
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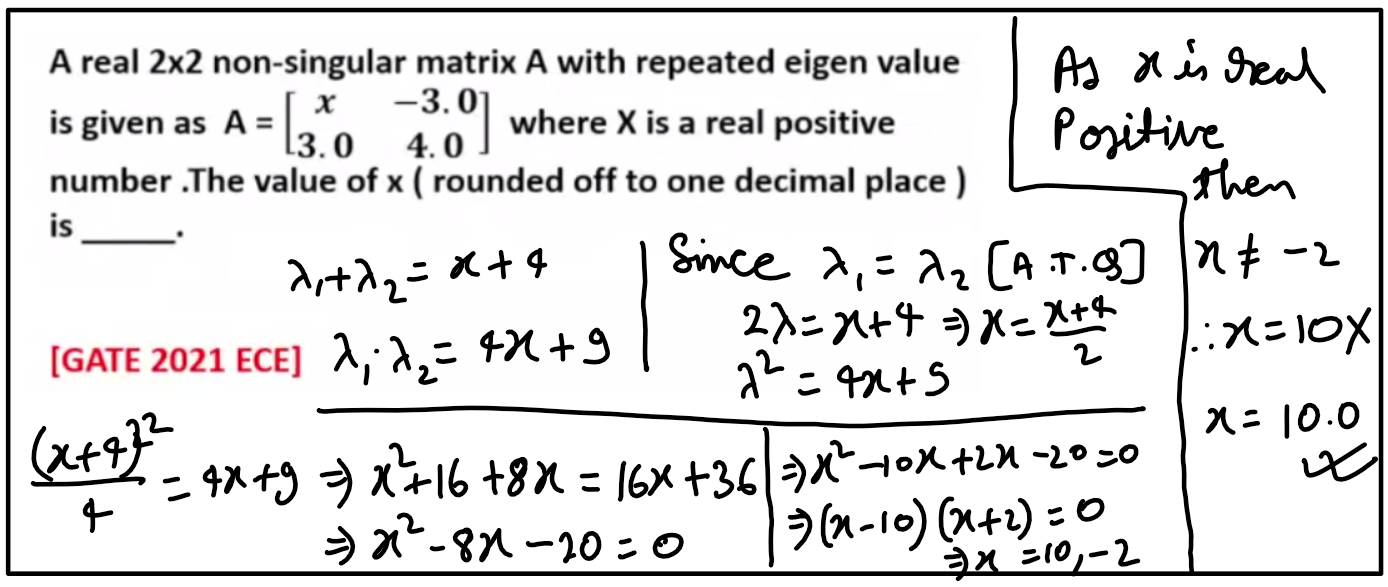



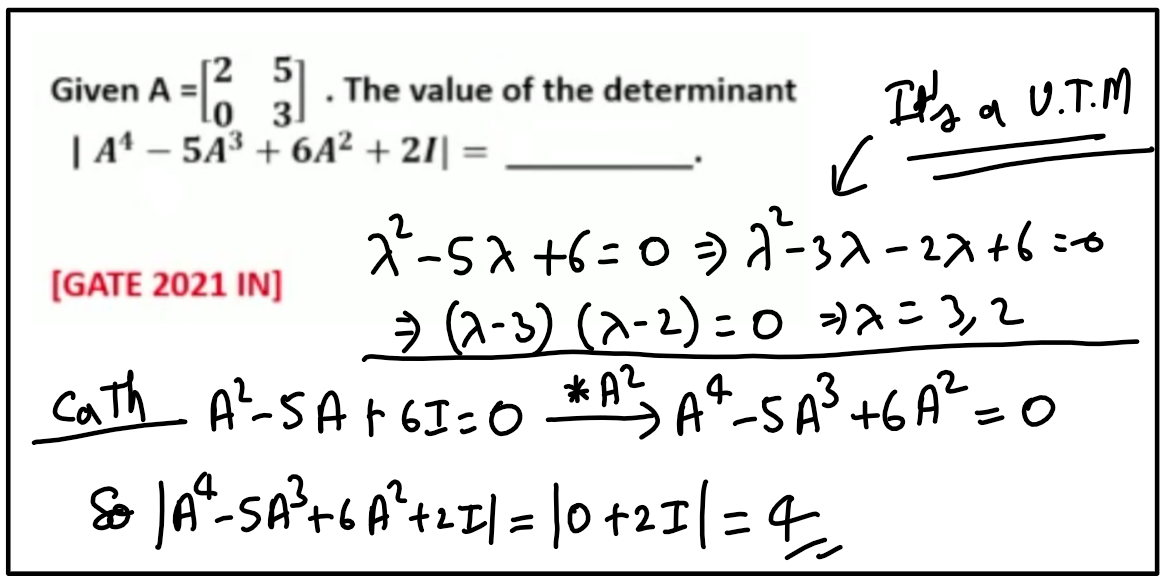


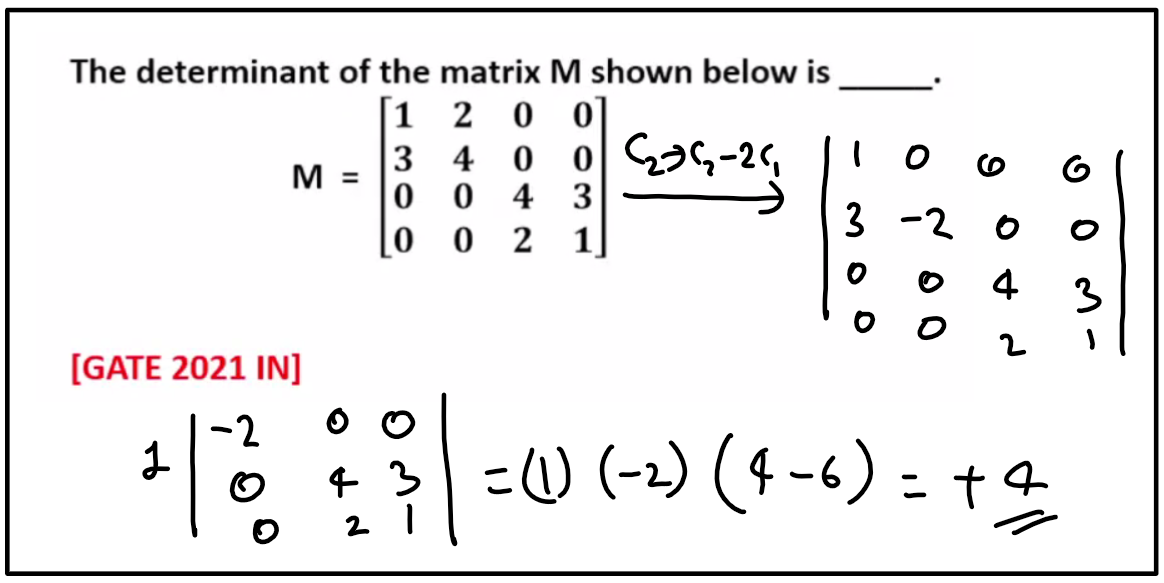


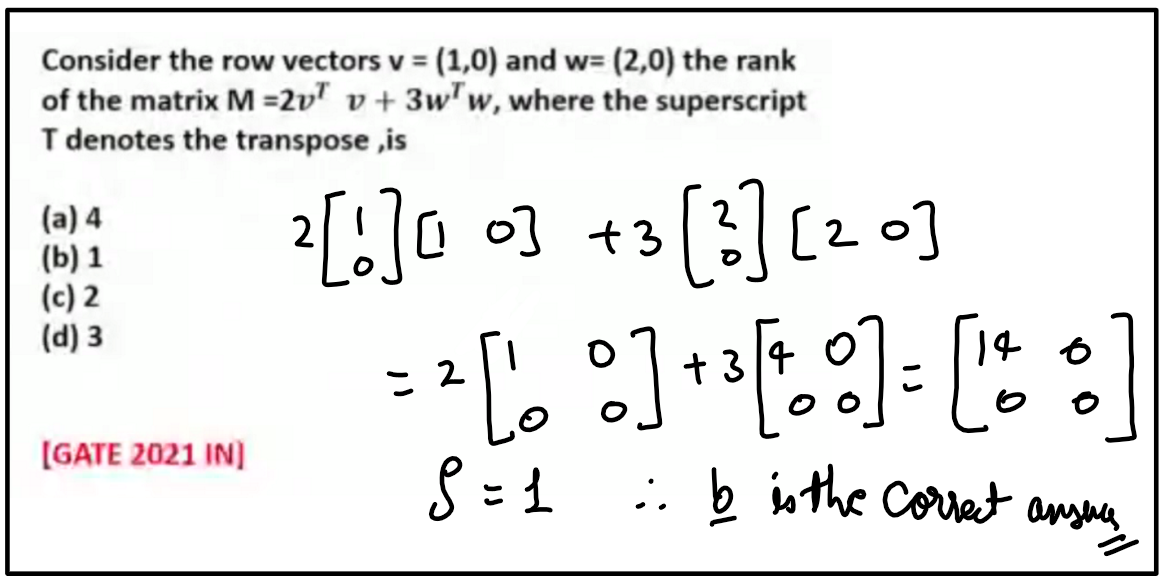


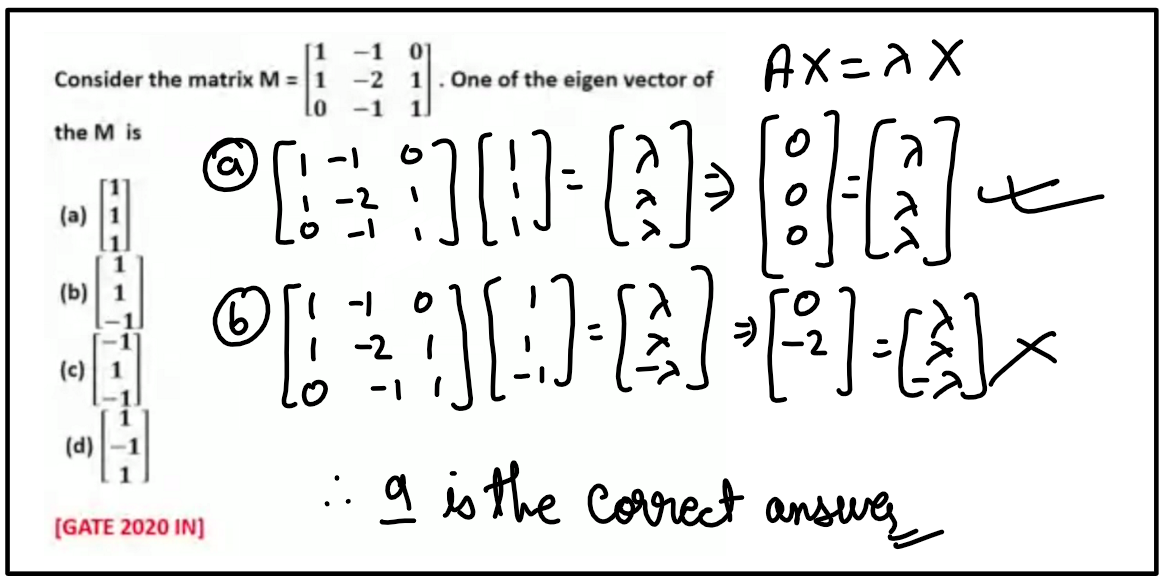


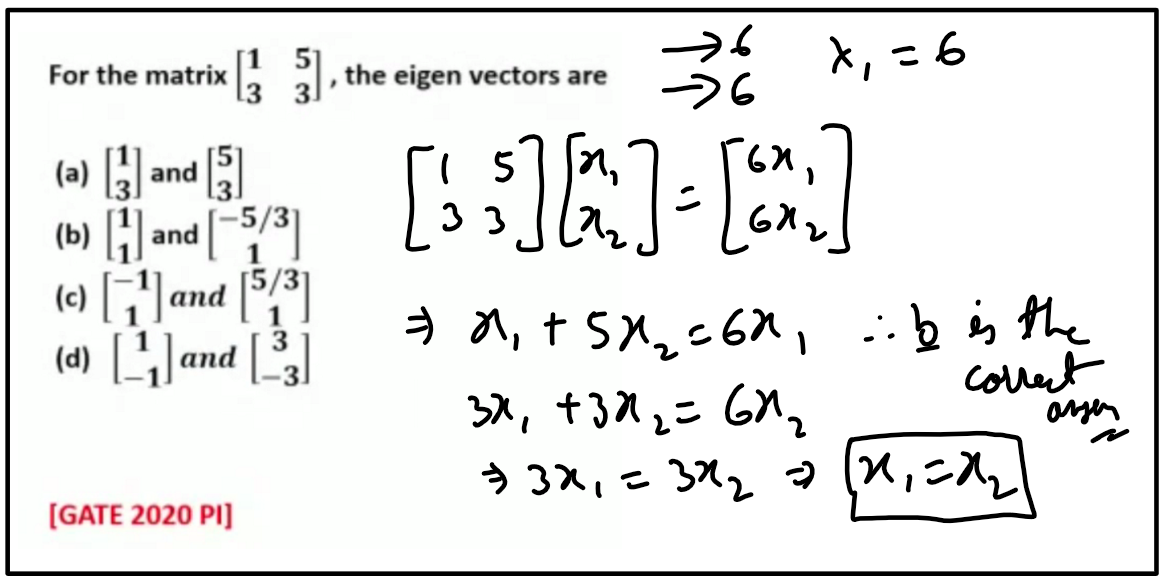




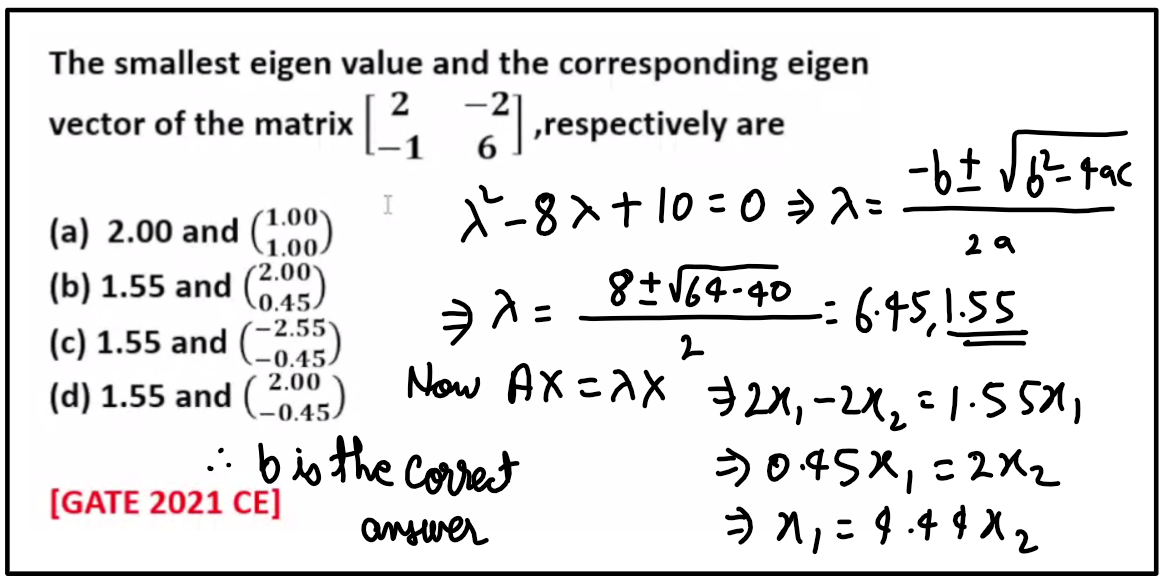


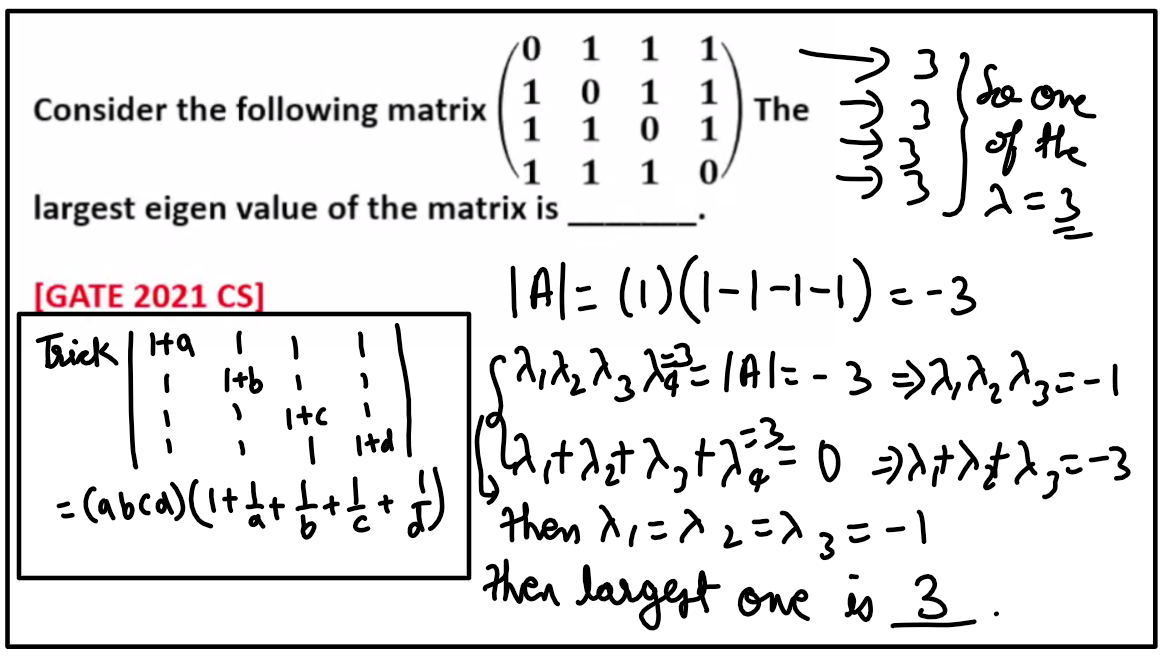


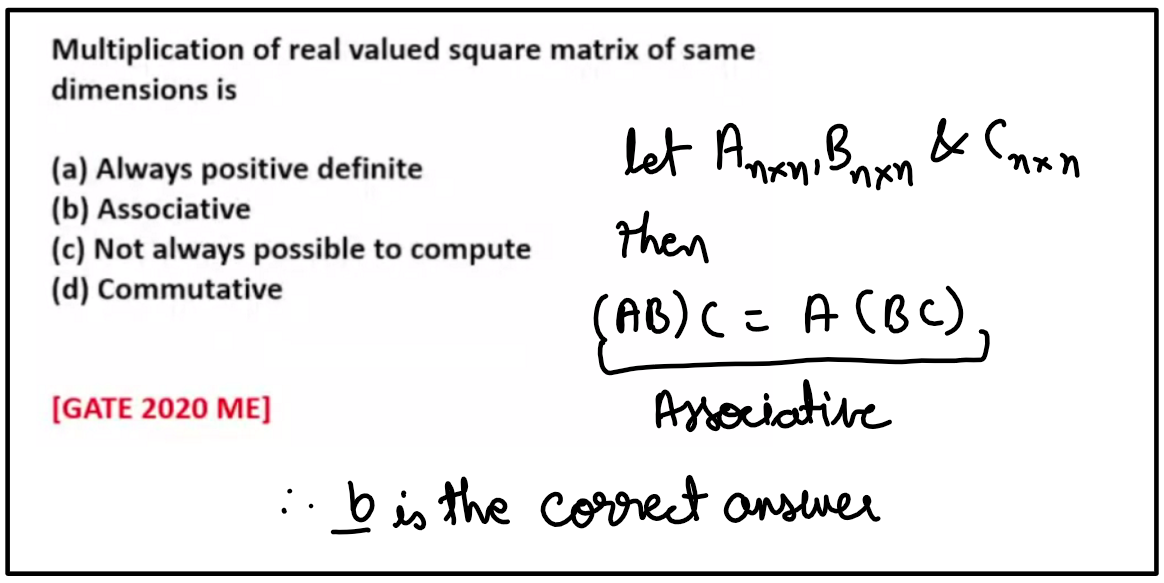


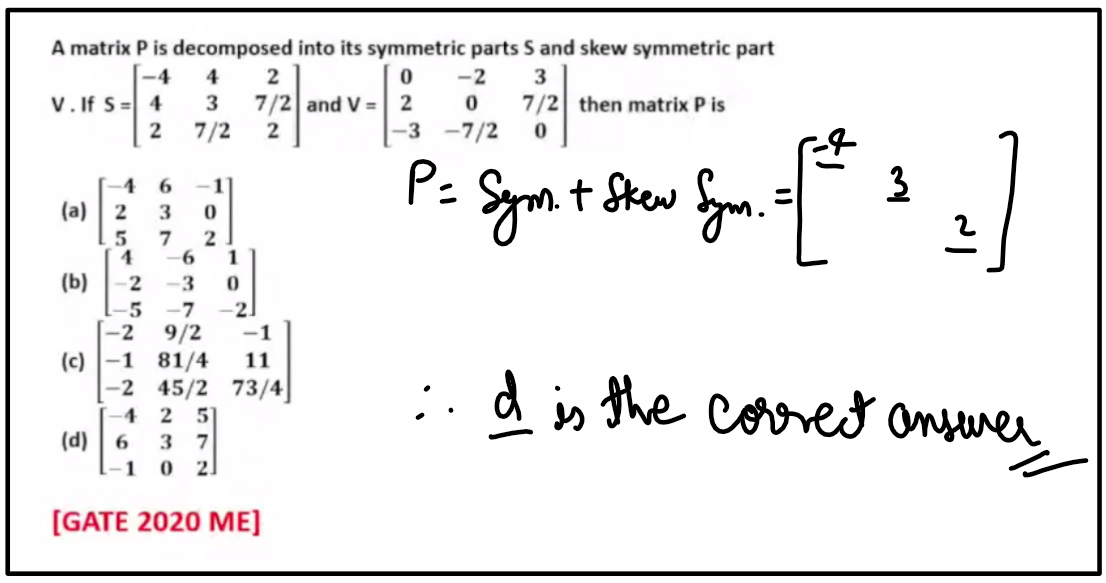


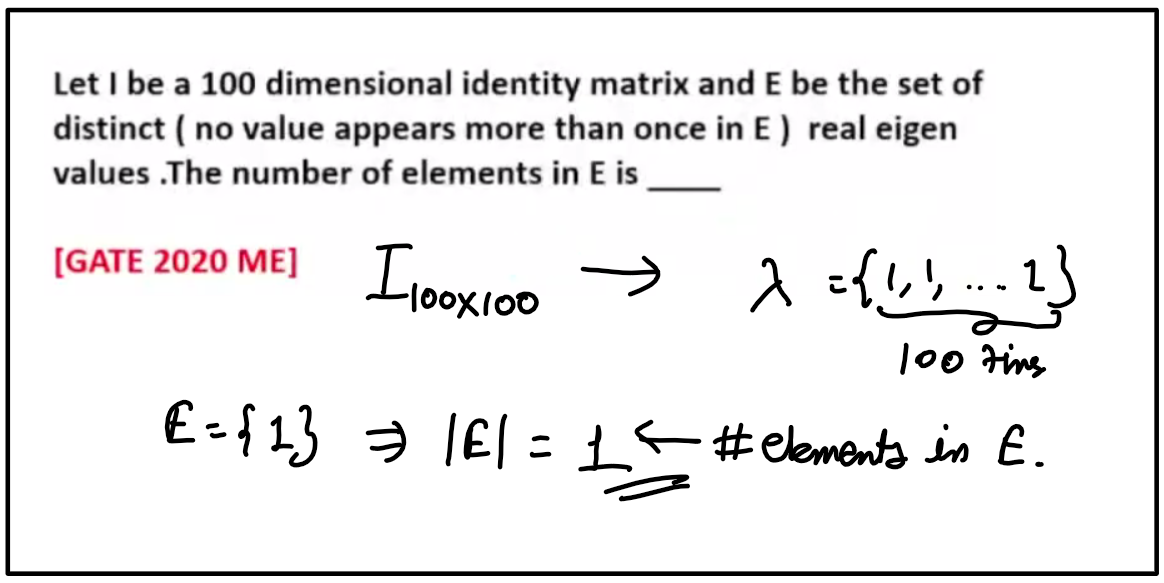
## Lecture 02

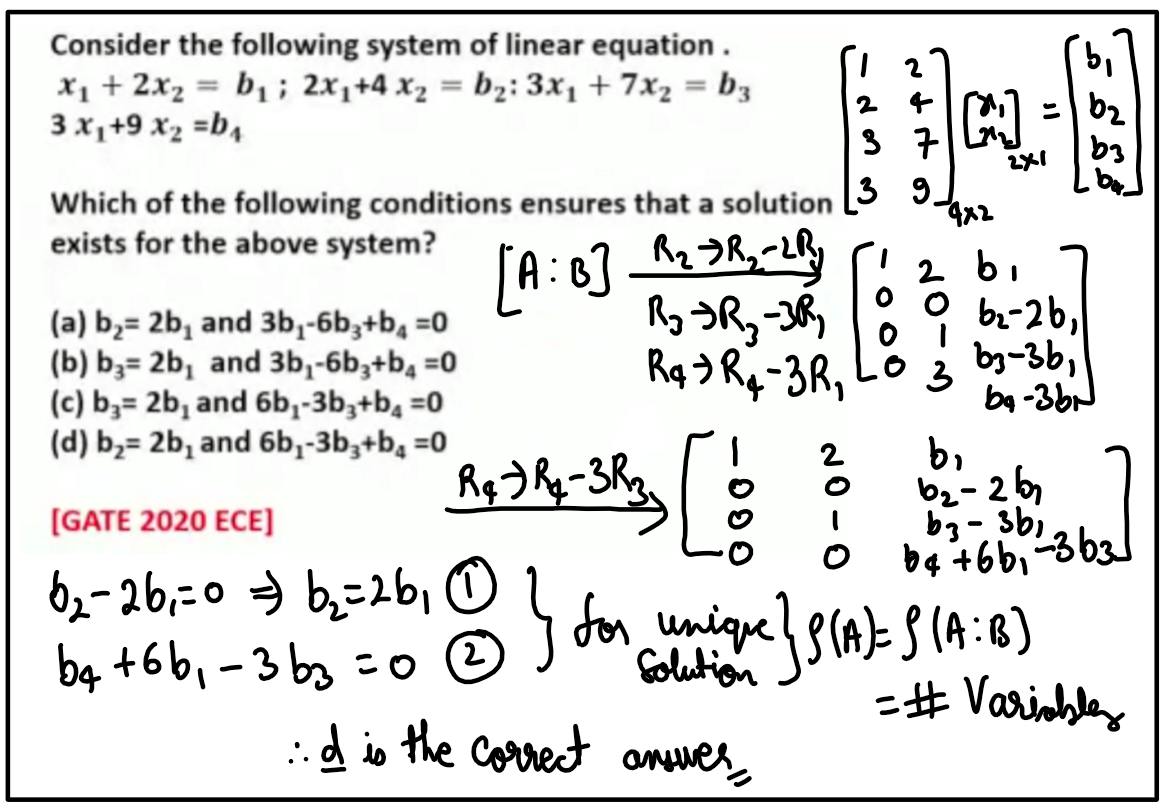


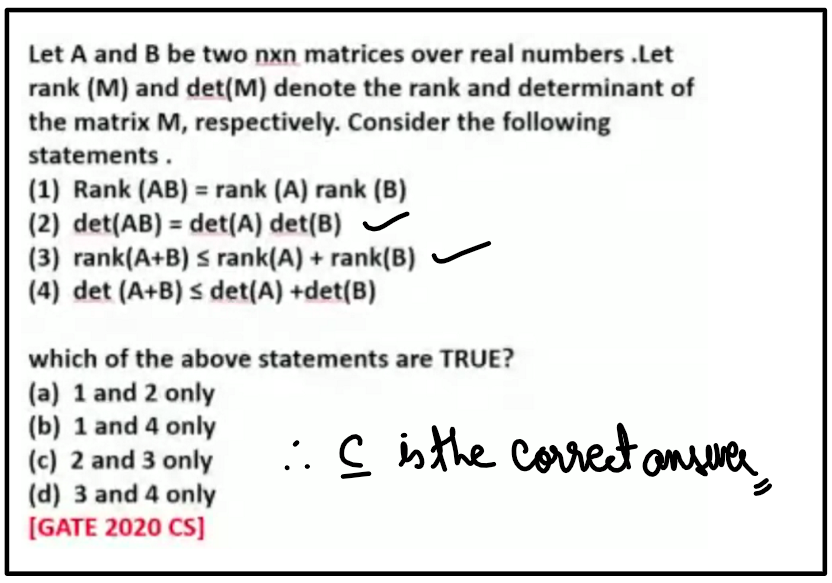


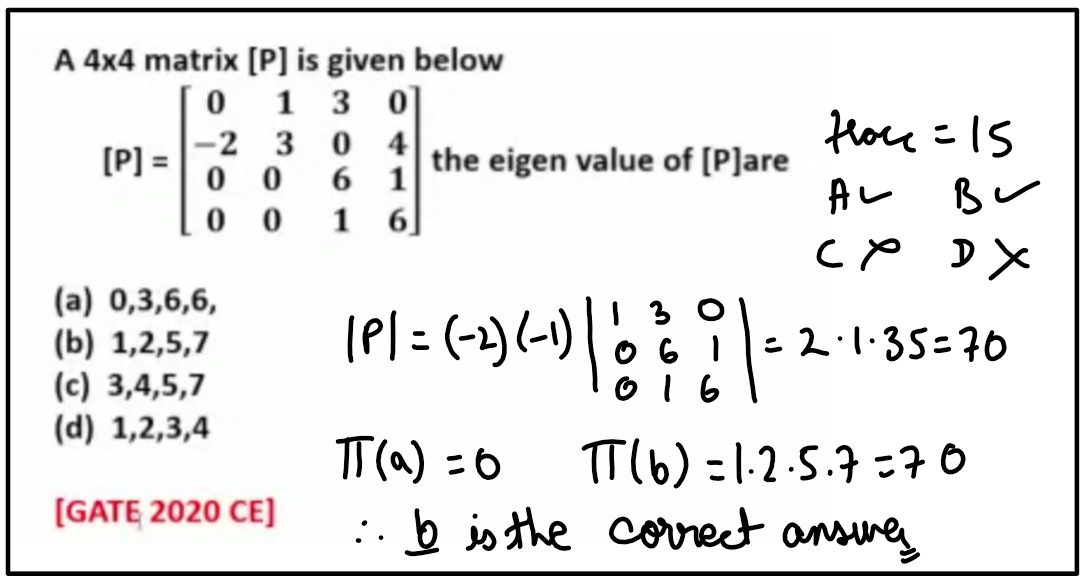


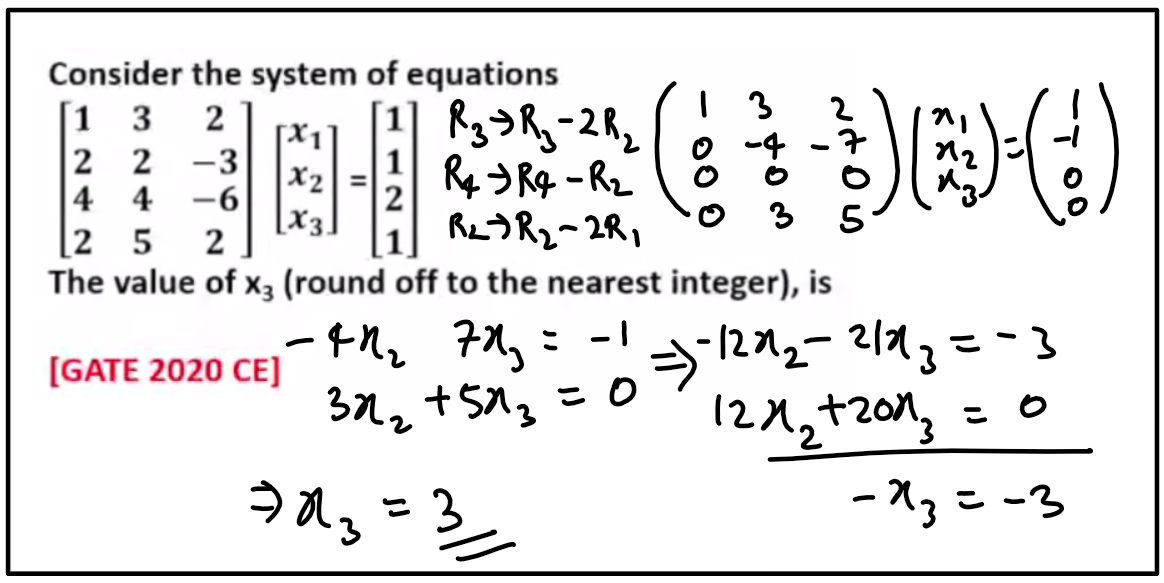


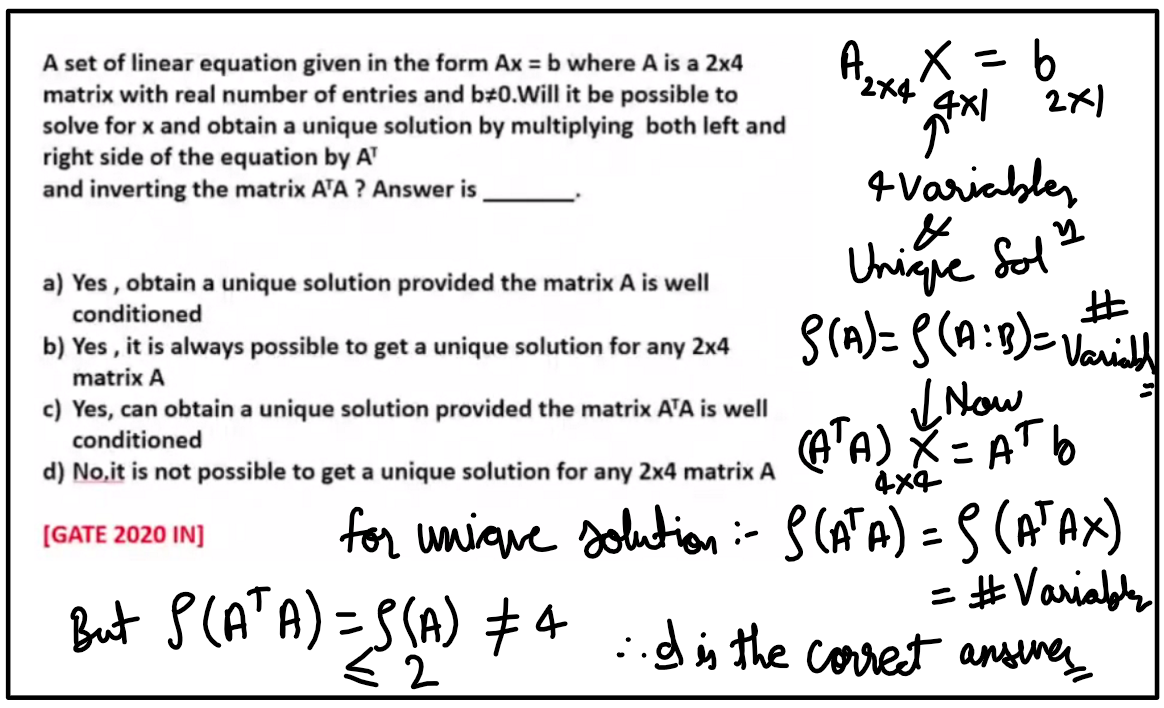












## Lecture 03