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ASSIGNMENT 7

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Download all python codes from

https://github.com/Y.Nagarani/ASSIGNMEN7/tree/main/CODES

and latex-tikz codes from

https://github.com/Y.Nagarani/ASSIGNMENT7/tree/main

1 Question No 2.15

Find x, if
$$(x-5-1)\begin{pmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{pmatrix}\begin{pmatrix} x \\ 4 \\ 1 \end{pmatrix} = 0$$

2 SOLUTION

Given,

$$\begin{pmatrix} x & -5 & -1 \end{pmatrix} \begin{pmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{pmatrix} \begin{pmatrix} x \\ 4 \\ 1 \end{pmatrix} = 0$$
 (2.0.1)

$$(x-2 -10 2x-8)$$
 $\begin{pmatrix} x\\4\\1 \end{pmatrix} = 0$ (2.0.2)

$$(x^2 - 2x - 40 + 2x - 8) = 0 (2.0.3)$$

$$x^2 - 48 = 0 (2.0.4)$$

$$x = 6.92 \tag{2.0.5}$$