

Linear Algebra Foundations #6 - An Equation involving Matrices

Given the following matrix A :

$$A = \begin{bmatrix} 1 & 1 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

Calculate the real numbers x and y such that:

$$A^2 + xA + yI = 0 \quad (I \text{ is the } 3 \times 3 \text{ identity matrix})$$

In the text box below, enter the integers x and y each on a new line, respectively. Do not leave any leading or trailing spaces.