Assignment-2($EE5600$)

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***Abstract*—This assignment deals with basic linear form.**

Download tex file from

https://github.com/satyam463/EE5600Ass1/blob/main/Assignment2.tex

1 Problem Statement

1.1 Linearform, Exercise 2, Question No 2

Find the value of k, if $\begin{pmatrix}2\\1\end{pmatrix}$ is solution of the equation

$$\begin{pmatrix}2 & 3\end{pmatrix}\mathbf{x} = k \tag{1.1.1}$$

2 Solution

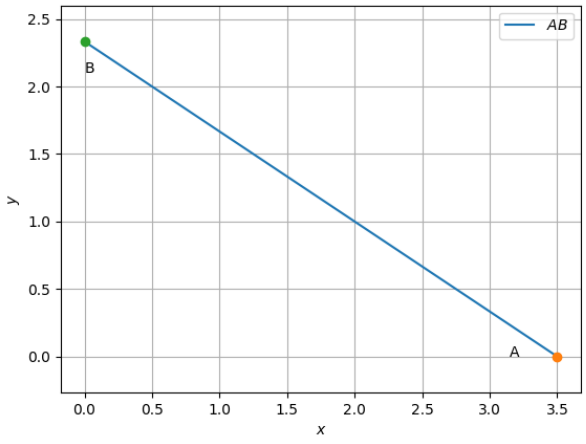

Fig. 0: Line equation $\begin{pmatrix}2 & 3\end{pmatrix}\mathbf{x} = 7$

Given:

$$\mathbf{x} = \begin{pmatrix}2\\1\end{pmatrix} \tag{2.0.1}$$

substitute (2.0.1) in the equation

$$\begin{pmatrix}2 & 3\end{pmatrix}\begin{pmatrix}2\\1\end{pmatrix} = k \tag{2.0.2}$$

$$\implies k = 7 \tag{2.0.3}$$

Therefore, equation becomes $\begin{pmatrix}2 & 3\end{pmatrix}\mathbf{x} = 7$.