1.2.2

AI25BTECH11001 - ABHISEK MOHAPATRA

August 27, 2025

Question:

Find the values of x, y, z so that the vectors $\begin{pmatrix} x \\ 2 \\ z \end{pmatrix}$ and $\begin{pmatrix} 2 \\ y \\ 1 \end{pmatrix}$ are equal.

Solution: From the given information,

$$\begin{pmatrix} x \\ 2 \\ z \end{pmatrix} = \begin{pmatrix} 2 \\ y \\ 1 \end{pmatrix} \tag{0.1}$$

$$\Rightarrow x = 2, y = 2, z = 1 \tag{0.2}$$