

ASSIGNMENT-5

Unnati Gupta

Download all python codes from

https://github.com/unnatigupta2320/Assignment_5/tree/master/codes

and latex-tikz codes from

https://github.com/unnatigupta2320/Assignment_5

1 QUESTION No-2.104

Find the equation of the plane which is at a distance of 7 units from the origin and normal to

$$\mathbf{n} = \begin{pmatrix} 3 \\ 5 \\ -6 \end{pmatrix}$$

2 SOLUTION

Given that,

- The distance $c = 7$ units and,
- The normal vector to the plane is $\mathbf{n} = \begin{pmatrix} 3 \\ 5 \\ -6 \end{pmatrix}$.
- So, Equation of the plane is given by:-

$$\mathbf{n}^T \mathbf{x} = c \quad (2.0.1)$$

$$\begin{pmatrix} 3 & 5 & -6 \end{pmatrix} \mathbf{x} = 7 \quad (2.0.2)$$

- Plot of the plane :-

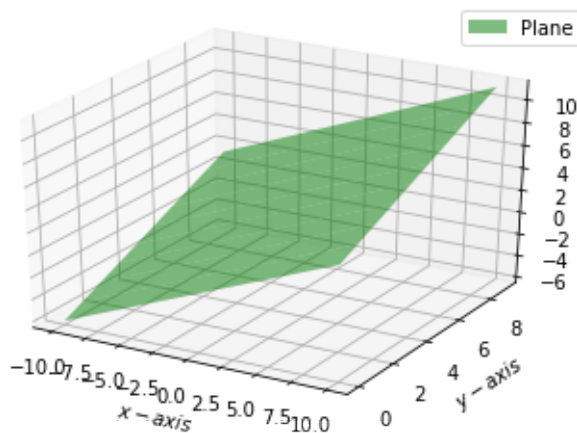


Fig. 2.1: Plot of the plane