## AI24BTECH11020 - RISHIKA KOTHA

Question: The fourth vertex **D** of a parallelogram ABCD whose three vertices are A(-2,3), B(6,7) and C(8,3) is

**Solution:** to find the vertex D of the parallelogram: we know that, in a parallelogram,

Vertices	Values
A	(2, 3)
В	(6, 7)
С	(8, 3)

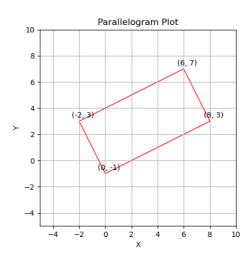
TABLE 0: Vertices

$$\implies D = A + C - B \tag{0.1}$$

$$\implies D = \begin{pmatrix} -2 + 8 - 6 \\ 3 + 3 - 7 \end{pmatrix} \tag{0.2}$$

$$\therefore D = \begin{pmatrix} 0 \\ -1 \end{pmatrix} \tag{0.3}$$

(0.4)



1