

Assignment 1

Lakshmi Gayathri Gudipudi - SM21MTECH11001

1 PROBLEM

(Q:9(ii) Find the area of Quadrilateral when four points are given

$$x_1 = (2) \quad x_2 = (3) \quad x_3 = (-3) \quad x_4 = (-2) \quad y_1 = (1) \quad y_2 = (5) \quad y_3 = (4) \quad y_4 = (-2)$$

(1.0.1)

2 SOLUTION

Area of Quadrilateral=

$$Area = 0.5 * (x_1 * y_2 + x_2 * y_3 + x_3 * y_4 + x_4 * y_1) - (y_1 * x_2 + y_2 * x_3 + y_3 * x_4 + y_4 * x_1)$$

(2.0.1)

We get:

$$Area = 25 \text{squnits} \quad (2.0.2)$$