

# Straight Lines Assignment

Gautam Singh

**Abstract**—This document contains the solution to Question 1 of Exercise 1 in Chapter 10 of the class 11 NCERT textbook.

- 1) Draw a quadrilateral in the Cartesian plane, whose vertices are

$$\mathbf{A} = \begin{pmatrix} -4 \\ 5 \end{pmatrix} \quad \mathbf{B} = \begin{pmatrix} 0 \\ 7 \end{pmatrix} \quad (1)$$

$$\mathbf{C} = \begin{pmatrix} 5 \\ -5 \end{pmatrix} \quad \mathbf{D} = \begin{pmatrix} -4 \\ -2 \end{pmatrix} \quad (2)$$

Also, find its area.

**Solution:** The points are plotted in Fig. 1. The plot is generated using the Python code codes/quad.py.

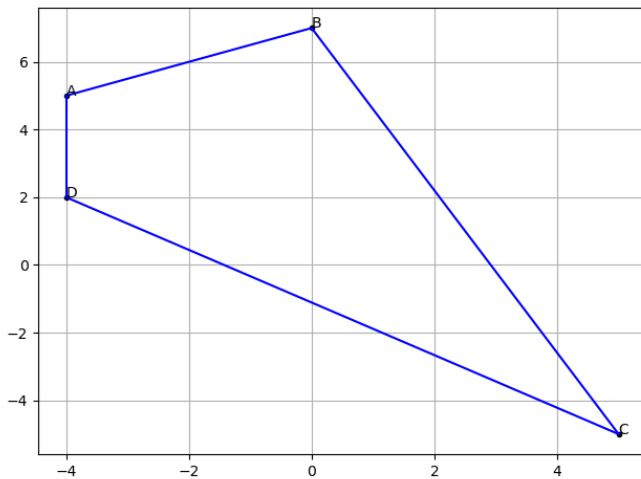


Fig. 1: Plot of quadrilateral  $ABCD$

We know that the area of