

Assignment 2

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vector

Abstract—This assignment deals with basic linear form.

Download all python codes from

https://github.com/STANZIN14005/stanzinyangdol/blob/main/assignment2/assignment2_ex_v_q_2_python_py.py

and latex codes from

<https://www.overleaf.com/project/614345a6bf02a0749cba133f>

Problem

Vector-2, Example-5, Question-3

Find the equation to the straight line cutting off an intercept -5 from the axis of Y and being equally inclined to the axis.

Solution:

From the given information we have, y intercept b = -5 and is being equally inclined to the axis, so x intercept a = 5 The Equation of a straight line is

$$\left(\frac{x}{a}\right) + \left(\frac{y}{b}\right) = 1 \quad (0.0.1)$$

$$\left(\frac{x}{5}\right) + \left(\frac{y}{-5}\right) = 1 \quad (0.0.2)$$

$$\Rightarrow ((x + y) = 5) \quad (0.0.3)$$

Therefore the required equation of a straight line is:

$$\Rightarrow (y = (x - 5)) \quad (0.0.4)$$

We get the required equation of the straight line to plot of the line

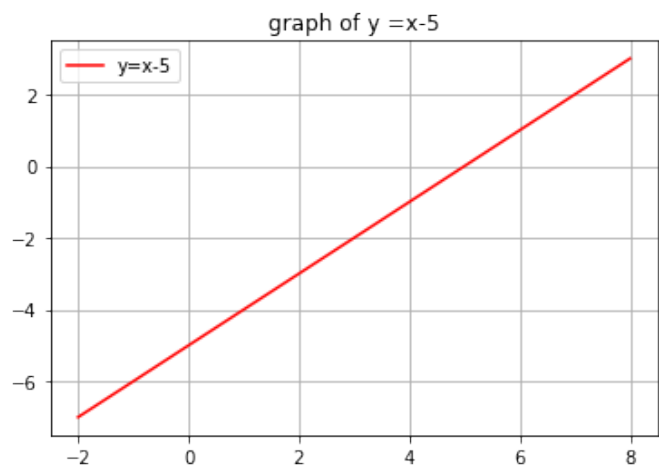


Fig. 0: Plot obtained from python code