

Coordinate Geometry

SAMEERGUPTA(sameergupta@sriprakashschools.com)

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10th Maths - Chapter 7

This is Problem-1.2 from Exercise 7.1

1. Find the distance between the following pairs of points.
ii) $(-5, 7), (-1, 3)$.

Solution: :

Given,

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

$$\mathbf{B} = \begin{pmatrix} -1 \\ 3 \end{pmatrix} \quad (2)$$

$$\mathbf{AB} = \begin{pmatrix} 4 \\ -4 \end{pmatrix} \quad (3)$$

$$\|AB\| = \sqrt{(4)^2 + (-4)^2} \quad (4)$$

$$\|AB\| = \sqrt{16 + 16} \quad (5)$$

$$\|AB\| = \sqrt{32} \quad (6)$$

$$\|AB\| = 2\sqrt{4} \quad (7)$$

$$(8)$$

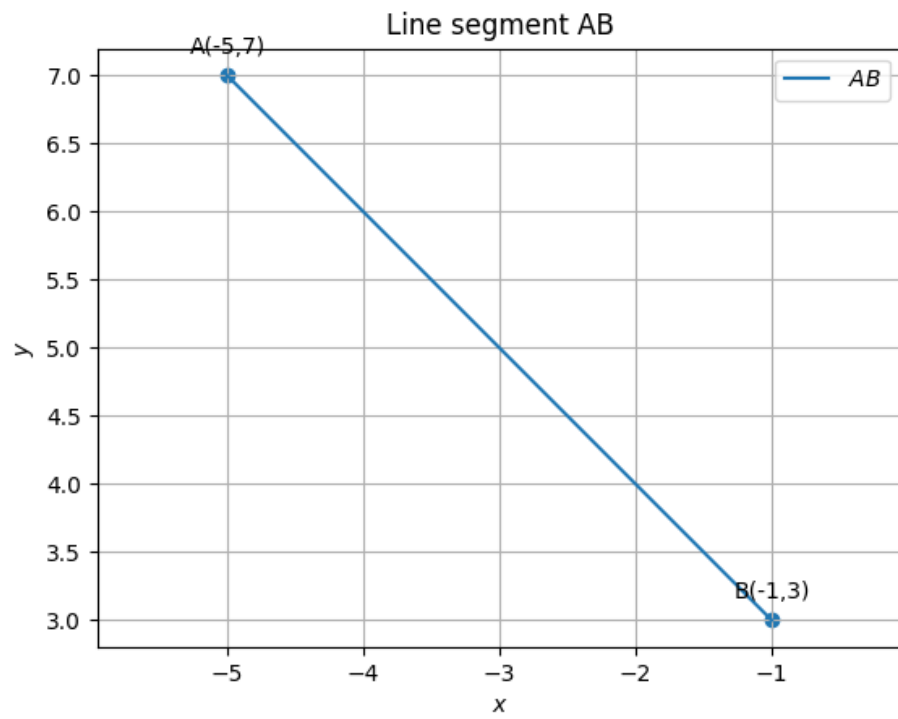


Figure 1: Line segment AB