## Coordinate Geometry

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## $10^{th}$ 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,

$$\mathbf{A} = \begin{pmatrix} -5\\7 \end{pmatrix} \tag{1}$$

$$\mathbf{B} = \begin{pmatrix} -1\\3 \end{pmatrix} \tag{2}$$

$$\mathbf{AB} = \begin{pmatrix} 4 \\ -4 \end{pmatrix} \tag{3}$$

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

$$|AB| = \sqrt{16 + 16} \tag{5}$$

$$|AB| = \sqrt{32} \tag{6}$$

$$|AB| = 2\sqrt{4} \tag{7}$$

(8)