

# Coordinate Geometry

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## 10<sup>th</sup> Maths - Chapter 7

This is Problem-1.1 from Exercise 7.1

- Find the distance between the following pairs of points.  
i)(2, 3), (4, 1)

**Solution:** :

Given,

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

$$\mathbf{B} = \begin{pmatrix} 4 \\ 1 \end{pmatrix} \quad (2)$$

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

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

$$|AB| = \sqrt{4 + 4} \quad (5)$$

$$|AB| = \sqrt{8} \quad (6)$$

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

$$(8)$$