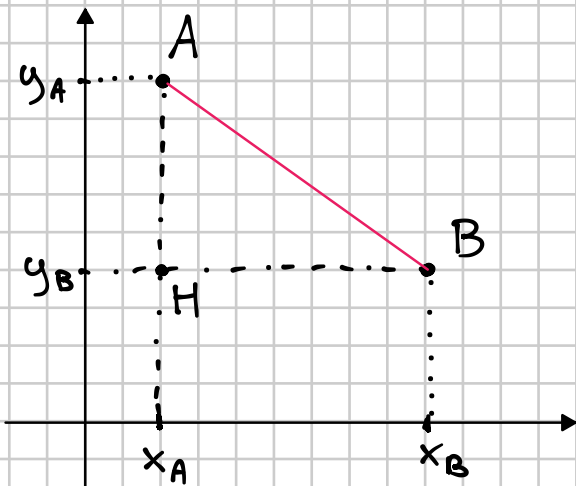


PIANO CARTESIANO: DISTANZA TRA 2 PUNTI

23/8/2021



$$A(x_A, y_A)$$

$$B(x_B, y_B)$$

$$\overline{AB} = \sqrt{HB^2 + HA^2} =$$

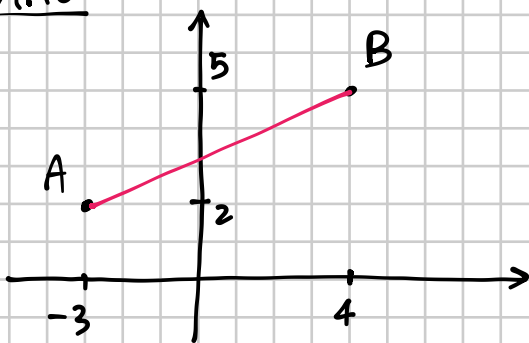
$$\text{DISTANZA DI A DA B} = \sqrt{(x_B - x_A)^2 + (y_A - y_B)^2}$$

↑
↑
SI POSSONO SCAMBIARE
perché poi elevo al 2

$$\overline{AB} = \sqrt{(x_A - x_B)^2 + (y_A - y_B)^2}$$

vale per qualsiasi
coppia di punti A e B
(anche in quadranti
diversi)

ESEMPIO

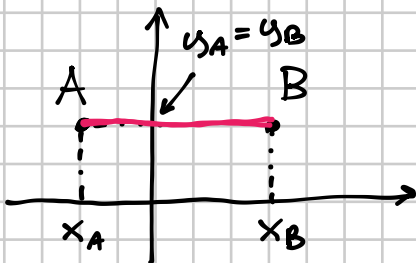


$$A(-3, 2)$$

$$B(4, 5)$$

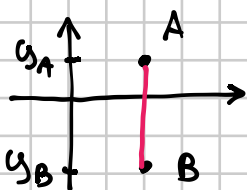
$$\overline{AB} = \sqrt{(-3-4)^2 + (2-5)^2} = \sqrt{49 + 9} = \sqrt{58} \approx 7,6$$

Se A e B stanno sulla stessa orizzontale:



$$\overline{AB} = \sqrt{(x_A - x_B)^2 + \underbrace{(y_A - y_B)^2}_0} = \sqrt{(x_A - x_B)^2} = |x_A - x_B|$$

Se A e B stanno sulla stessa verticale



$$\overline{AB} = |y_A - y_B|$$