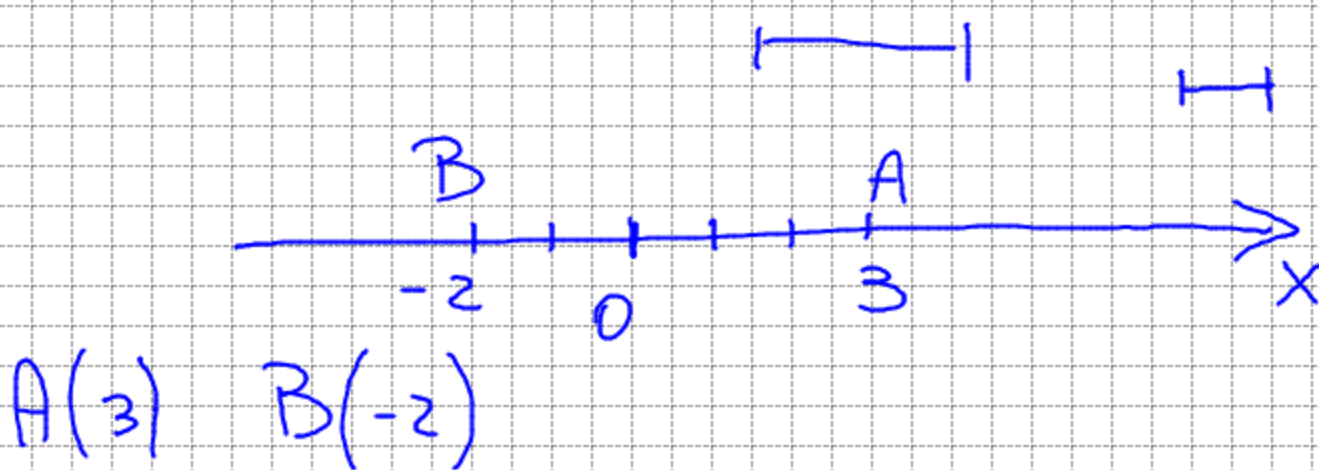
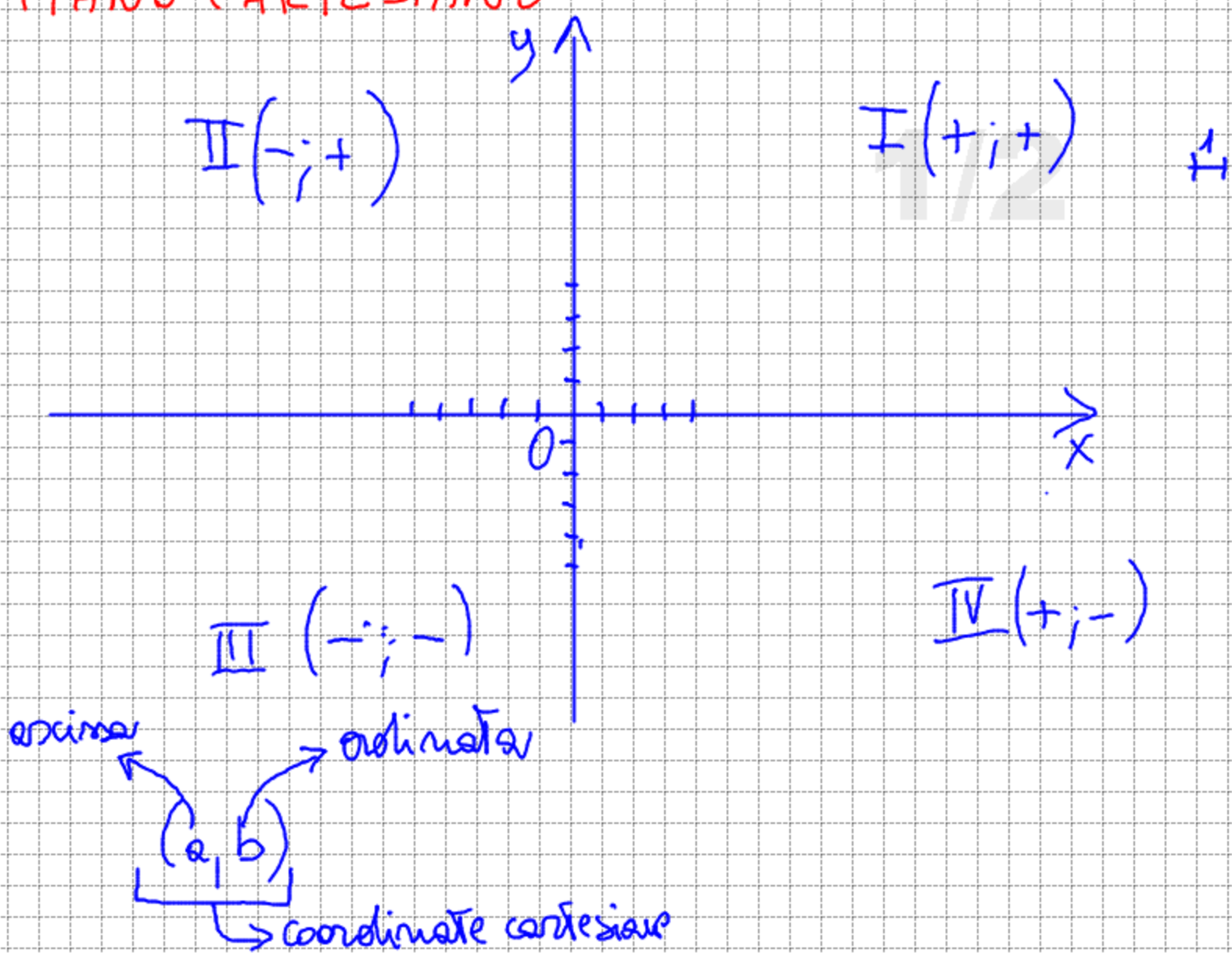
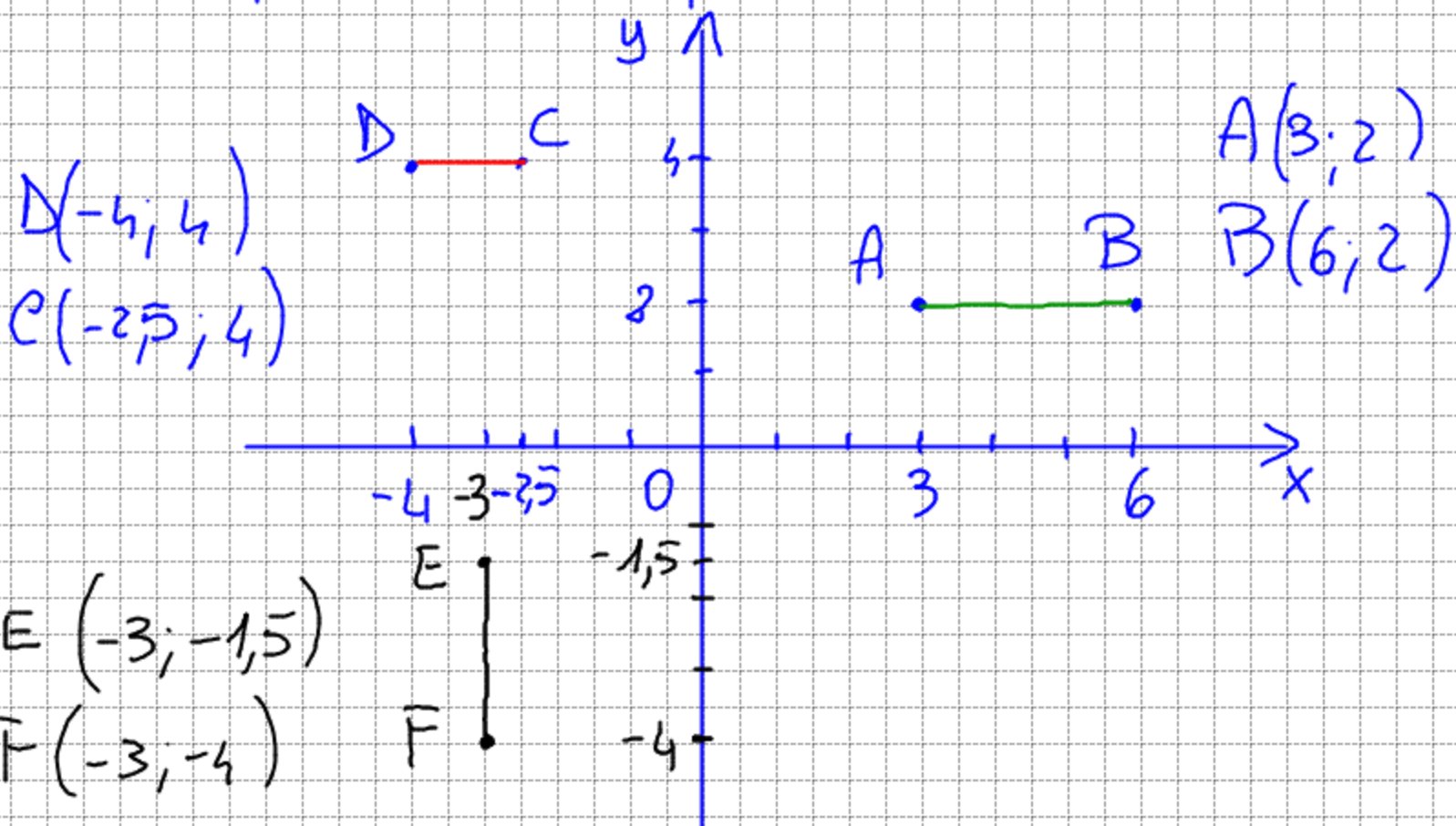


# PIANO CARTESIANO



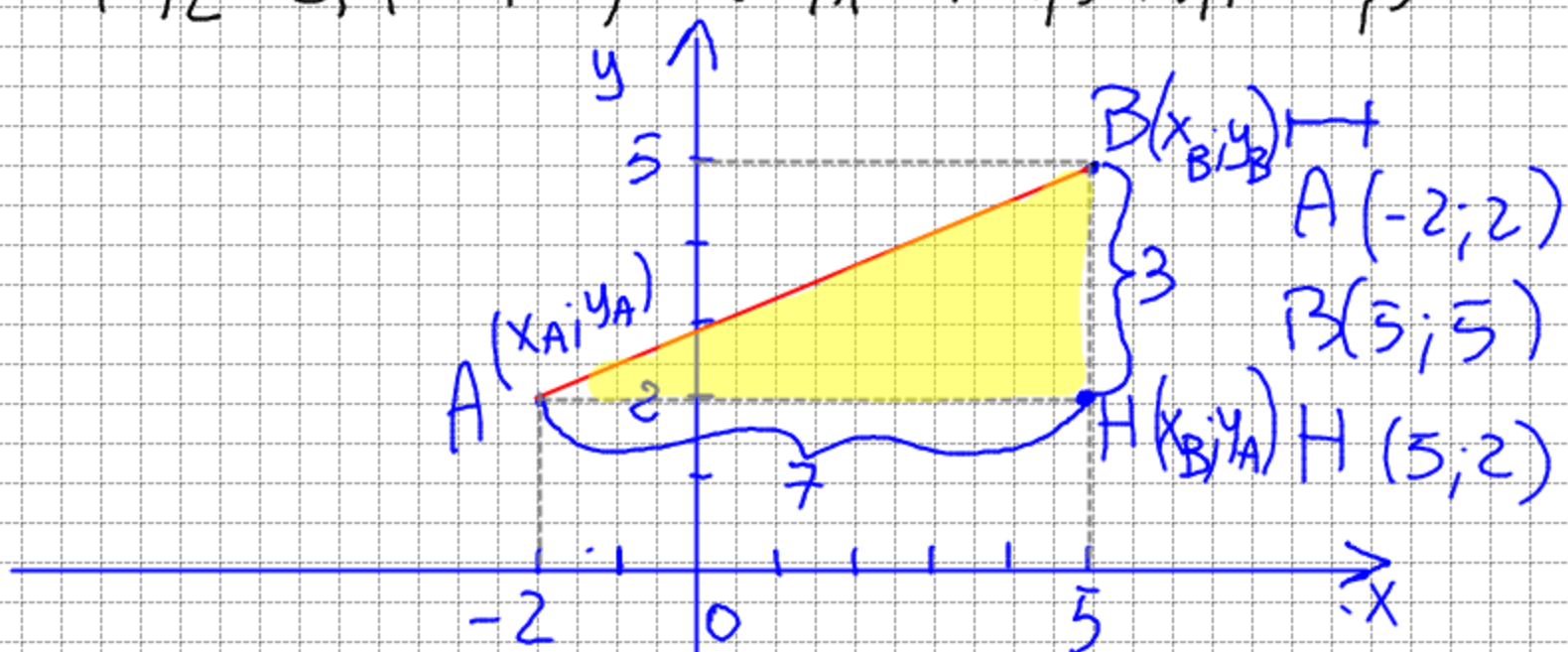
$$d(A; B) = |A - B| = |B - A| = |3 - (-2)| = |-2 - 3| = 5$$



$$\overline{AB} = |x_B - x_A| = |6 - 3| = 3$$

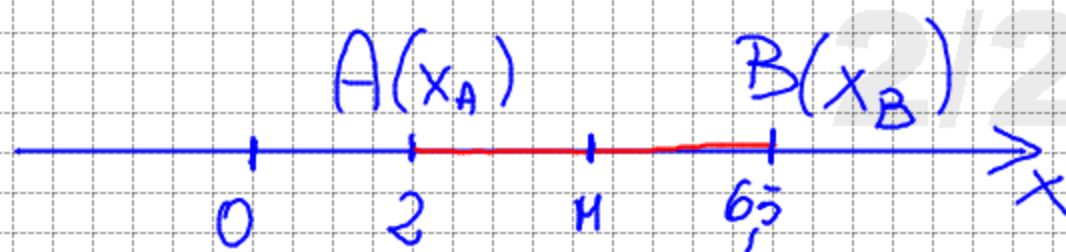
$$\overline{DC} = |x_C - x_D| = |-2.5 - (-4)| = |-2.5 + 4| = 1.5$$

$$\overline{EF} = |y_E - y_F| = |-1.5 - (-4)| = |-1.5 + 4| = 2.5$$

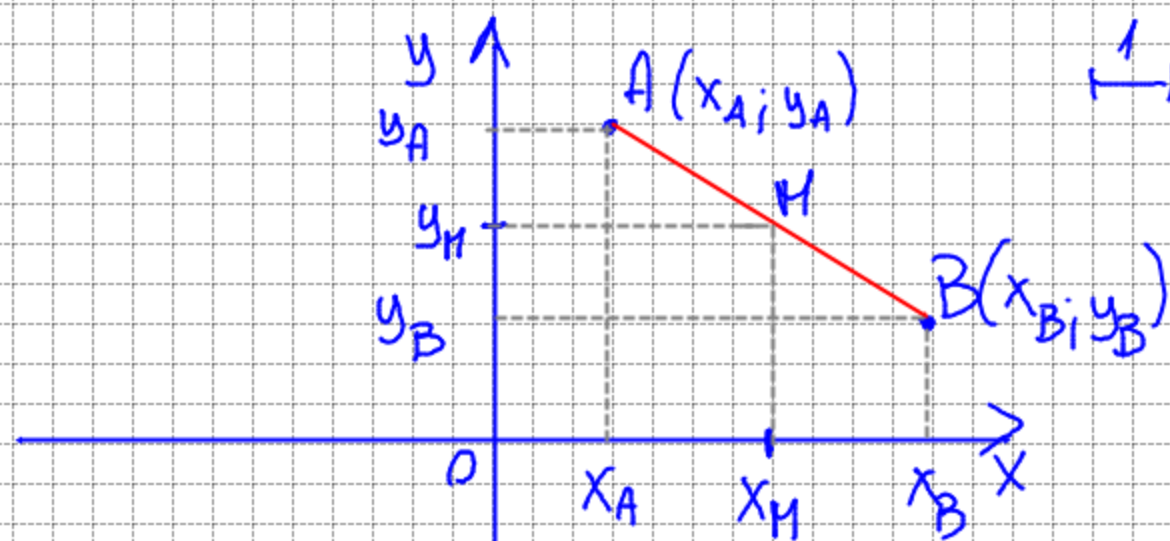


$$\overline{AB} = \sqrt{(x_A - x_B)^2 + (y_A - y_B)^2}$$

## PUNTO MEDIO

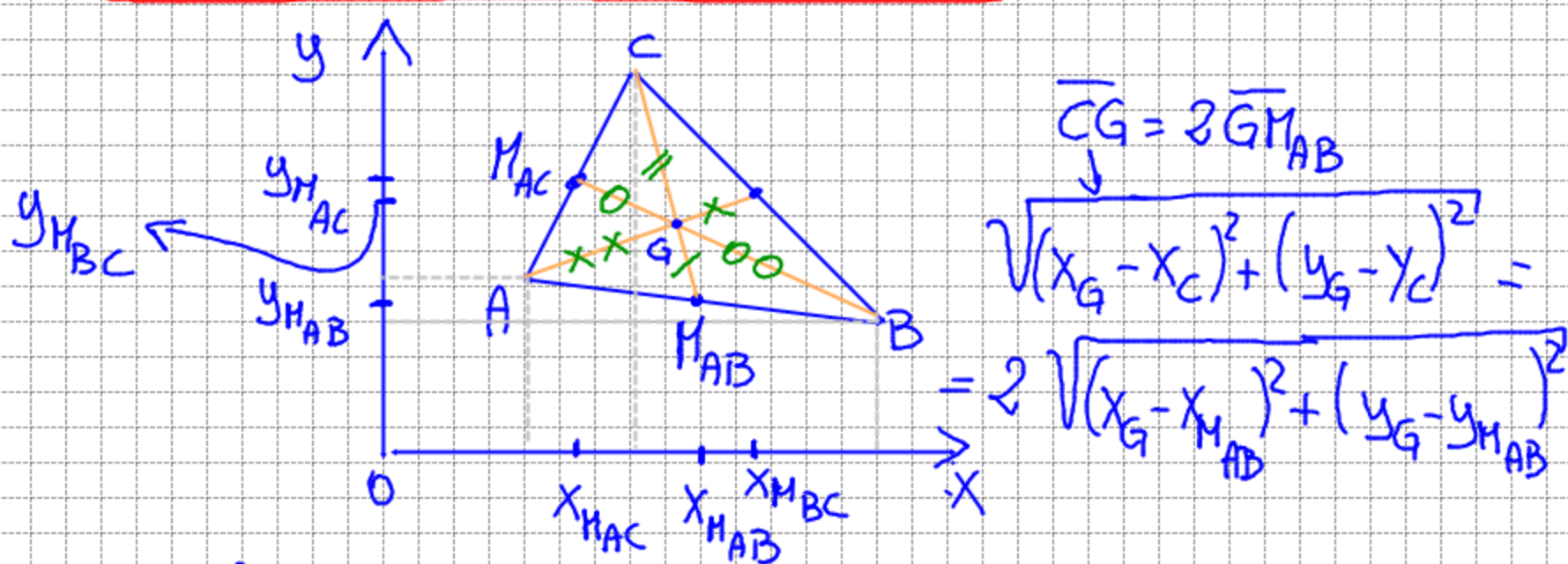


$$x_M = \frac{x_A + x_B}{2} = \frac{6,5 + 2}{2} = \frac{8,5}{2} = 4,25$$



$$M(x_M; y_M) \begin{cases} x_M = \frac{x_A + x_B}{2} \\ y_M = \frac{y_A + y_B}{2} \end{cases}$$

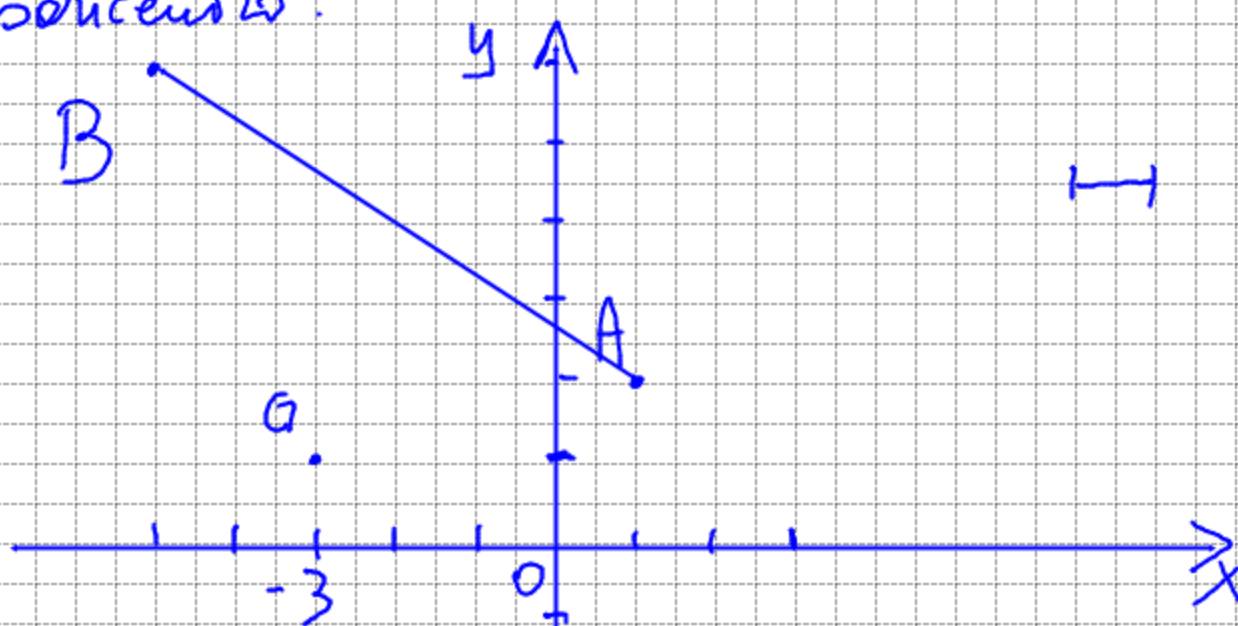
## BARICENTRO DI UN TRIANGOLO



$$G(x_G; y_G) \begin{cases} x_G = \frac{x_A + x_B + x_C}{3} \\ y_G = \frac{y_A + y_B + y_C}{3} \end{cases}$$

ES

Dato il triangolo  $\hat{A}BC$  con  $A(1; 2)$ ;  $B(-5; 6)$  e  $G(-3; 1)$  trova le coordinate di  $C$   
 ↓  
 baricentro.



$C(x_C; y_C)$

$$\begin{cases} x_G = \frac{x_A + x_B + x_C}{3} \\ y_G = \frac{y_A + y_B + y_C}{3} \end{cases} \begin{cases} x_C = 3x_G - x_A - x_B \\ y_C = 3y_G - y_A - y_B \end{cases} \begin{cases} x_C = -13 \\ y_C = -5 \end{cases}$$