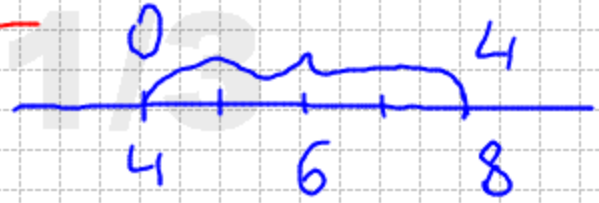
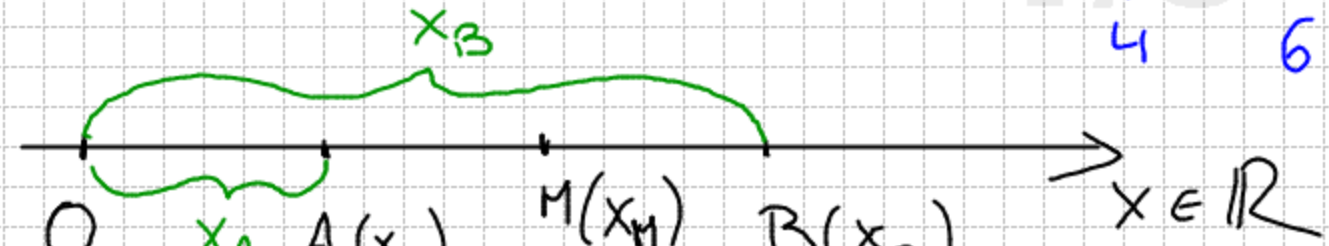
PUNTO MEDIO DI UN SEGMENTO

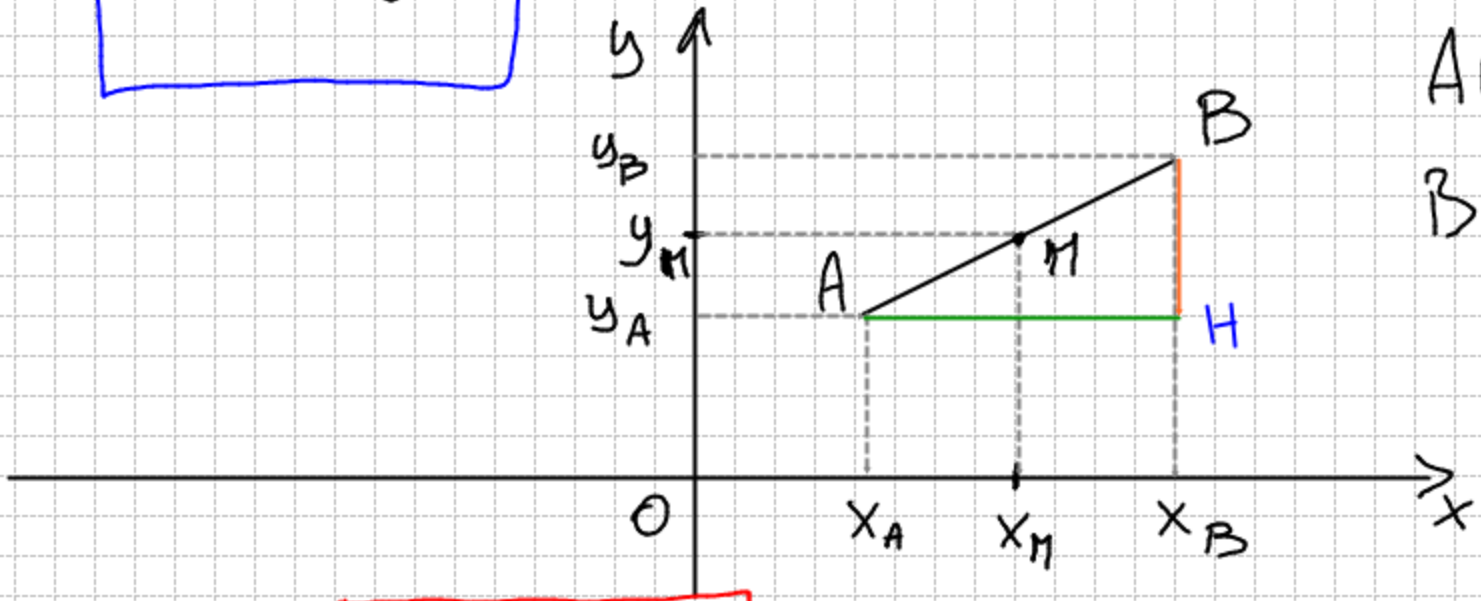




4 8

$$x_M = \frac{x_A + x_B}{2}$$

$$\frac{x_B - x_A}{2} + x_A = \frac{x_B + x_A + 2x_A}{2}$$



$A(x_A; y_A)$

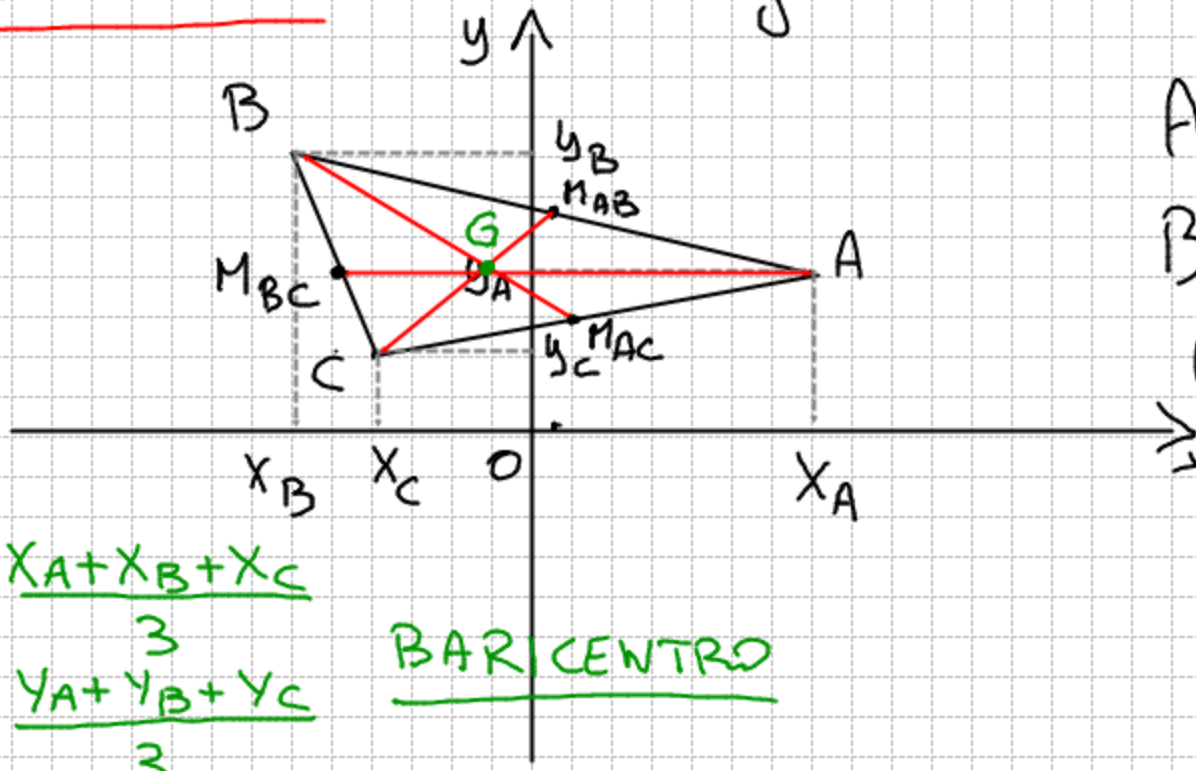
$B(x_B; y_B)$

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

$$M(x_M; y_M)$$

BARICENTRO DI UN TRIANGOLO

Il baricentro di un triangolo è il punto di incontro delle tre mediane del triangolo:



$A(x_A ; y_A)$

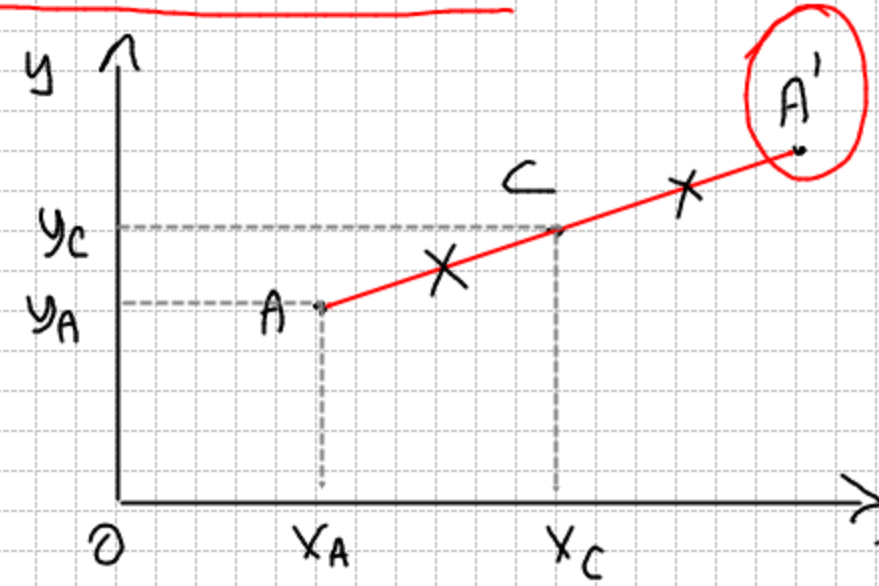
$B(x_B ; y_B)$

$C(x_C ; y_C)$

$$G \begin{cases} x_G = \dfrac{x_A + x_B + x_C}{3} \\ y_G = \dfrac{y_A + y_B + y_C}{3} \end{cases}$$

BARICENTRO

SIMMETRIA CENTRALE



$A(x_A; y_A)$

$C(x_C; y_C)$

$A' = ?$

C è il punto medio del segmento di estremi A e A' quindi

$$x_C = \frac{x_A + x_{A'}}{2} \qquad y_C = \frac{y_A + y_{A'}}{2}$$

→ incognite

$$A' \begin{cases} x_{A'} = 2x_C - x_A \\ y_{A'} = 2y_C - y_A \end{cases}$$