$$\left.\begin{array}{l}\vec{u}=[x_u, y_u]\\ \vec{v}=[x_v, y_v]\end{array}\right\} \Rightarrow \left\{\begin{array}{l} k.\vec{u}=[k.x_u, k.y_u] \\ \vec{u}+\vec{v}=[x_u+x_v, y_u+y_v] \\ <\vec{u},\vec{v}>=x_u.x_v+y_u.y_v \end{array}\right.$$

$$A(x_a, y_a) \quad B(x_{b.} y_b)$$

Punto medio: $M\left(\frac{x_a+x_b}{2}, \frac{y_a+y_b}{2}\right)$

$$\vec{AB}=[x_b-x_a, y_b-y_a]$$

Producto interno: $<\vec{u},\vec{v}>=|\vec{u}|.|\vec{v}|.\cos(\widehat{\vec{u},\vec{v}})$

$\vec{u}$ y $\vec{v}$ colineales $\Leftrightarrow \begin{vmatrix} x_u & x_v \\ y_u & y_v \end{vmatrix}=0$

$$\left.\begin{array}{c}A(x_a, y_a)\\ \vec{u}=[x_u, y_u]\\ A+\vec{u}=B\end{array}\right\} \Rightarrow B(x_a+x_u, y_a+y_u)$$