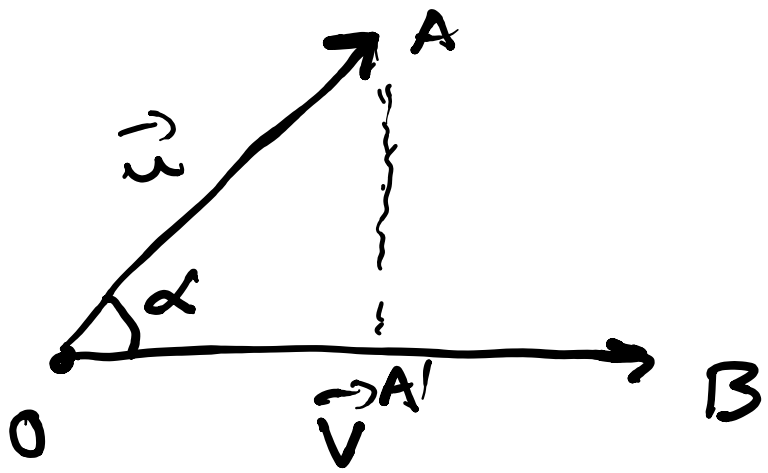
5.5 Producto escalar

martes, 14 de abril de 2020 22:49



$$OA' = |\vec{u}| \cdot \cos\alpha$$

$$\vec{u} \cdot \vec{v} = \text{proy}_{\vec{v}} \vec{u} \cdot \vec{v} = |\vec{u}| \cdot \cos\alpha \cdot |\vec{v}|$$

$$\vec{u} \cdot \vec{v} = (u_1, u_2, \dots, u_n) \cdot (v_1, v_2, \dots, v_n$$

$$(1,2,3,4,5) \cdot (10,20,30,40,50) = 1 \cdot 10$$

$= |\vec{u}| \cdot |\vec{v}| \cdot \cos\alpha$

$\cdot) = u_1 \cdot v_1 + u_2 \cdot v_2 + \cdots + u_n \cdot v_n$

$+ 2 \cdot 20 + 3 \cdot 30 + 4 \cdot 40 + 5 \cdot 50 = 550$