A = (3, 4, 2)

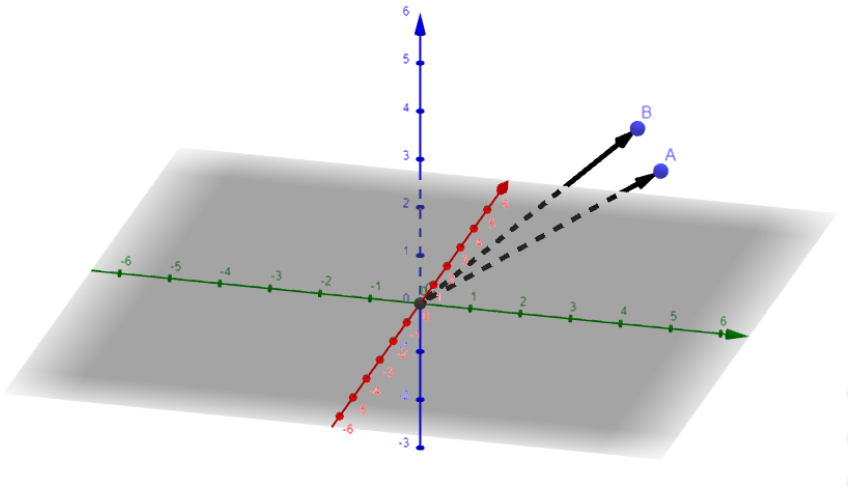
B = (5, 3, 2)

C = Interseca(EjeX, EjeZ)
→ (0, 0, 0)

u = Vector(C, A)
→ $\begin{pmatrix}3\\4\\2\end{pmatrix}$

v = Vector(C, B)
→ $\begin{pmatrix}5\\3\\2\end{pmatrix}$

Entrada...



16/05/22 Actividad / Jim Díaz y Samuel Arocha

Vector Unitario:

$\vec{A} = (3,4,2)$ $\|\vec{A}\| = \sqrt{3^2+4^2+2^2} = \sqrt{29}$ Magnitud A

$\frac{\vec{A}}{\|A\|} = \left(\frac{3}{\sqrt{29}}, \frac{4}{\sqrt{29}}, \frac{2}{\sqrt{29}}\right)$

$\vec{B} = (5,3,2)$ $\|\vec{B}\| = \sqrt{5^2+3^2+2^2} = \sqrt{38}$ Magnitud B

$\frac{\vec{B}}{\|B\|} = \left(\frac{5}{\sqrt{38}}, \frac{4}{\sqrt{38}}, \frac{2}{\sqrt{38}}\right)$

Producto punto

$\vec{A} \cdot \vec{B} = 15+12+4 = 31$

Ángulo entre Vectores

$\cos^{-1} \frac{31}{\sqrt{29}\cdot\sqrt{38}} = 20,96°$