

Problema 4.2 = 18

$$u = \frac{-2^y}{9^x} \Rightarrow (9; -2)$$

módulo

$$|\vec{u}| = \sqrt{9^2 + (-2)^2}$$

$$|\vec{u}| = \sqrt{81 + 4}$$

$$|\vec{u}| = \sqrt{85}$$

$$v = \frac{6^y}{10^x} (10; 6)$$

módulo

$$|\vec{v}| = \sqrt{10^2 + 6^2}$$

$$|\vec{v}| = \sqrt{100 + 36}$$

$$|\vec{v}| = \sqrt{136}$$

Producto Escalar

$$(9, -2) \cdot (10; 6)$$

$$(9 \cdot 10) + (-2 \cdot 6)$$

$$(90) + (-12)$$

$$= 78$$

cos entre 2 vectore

$$\cos \theta = \frac{u \cdot v}{|\vec{u}| \cdot |\vec{v}|}$$

$$\theta_{\cos^{-1}} = 78$$

$$\frac{78}{\sqrt{85} \cdot \sqrt{136}}$$

$$\theta = 76^\circ 46' 37,56''$$

Nota = Los vectores dados no son paralelos ni ortogonales.

