TAREA EN CLASES

1) $V_1 = i+j$ y $V_2 = i-j$

$V_1 \cdot V_2 = (1)\cdot(1) + (1)\cdot(-1)$

$= 1-1$

$= 0$

$|V_1| = \sqrt{(1)^2+(1)^2}$ $\quad |V_2| = \sqrt{(1)^2+(-1)^2}$

$= \sqrt{2}$ $\quad = 0$

$= 0$

$\theta = \cos^{-1}\left(\frac{0}{\sqrt{2}+\sqrt{0}}\right)$

$= 90°$ R//

2) $V_1 \cdot V_2 = 2i+5j$ y $V_2 = 5i+2j$

$V_1 \cdot V_2 = ((2)\cdot(5)) + ((5)((2))$

$= 10+10$

$|V_1| \sqrt{20}\ \sqrt{29} = \frac{20}{29}$

$\theta = \cos^{-1}\frac{20}{29} = 46.40°$

$\theta = 46.40$ R//

3) $V_1 = V_2! - 3j$ y $V_2 = -9j+6j$

$|V_1| = \frac{V_1 \cdot V_2}{V_2\ V_2} = V_2$

$|V| \cdot V_2\ c(2)\ (-9) + (3) \times (6) - \frac{36}{\sqrt{117}} =$

$-3 \cdot 3^2 = \frac{-36}{117} \cdot 3.33 = -10246$

$= 7.0246i - 10246$ R1

2) $V_1 = i + j \quad V_2 = 2i - 3j$

$$V_1 = \hat{u}_{V_2} = \frac{2 \times 2 + 1 \times -3}{\sqrt{2^2 + -3^2}} = \frac{-1}{\sqrt{13}} = -0.28$$

$$V_1 = \sqrt{1^2 + 1^2} = \sqrt{2}$$

$$V_2 = \sqrt{2}$$

$$\cos\theta = \frac{0}{\sqrt{2} \cdot \sqrt{2}} = 0.=0$$

$\theta = 90°$