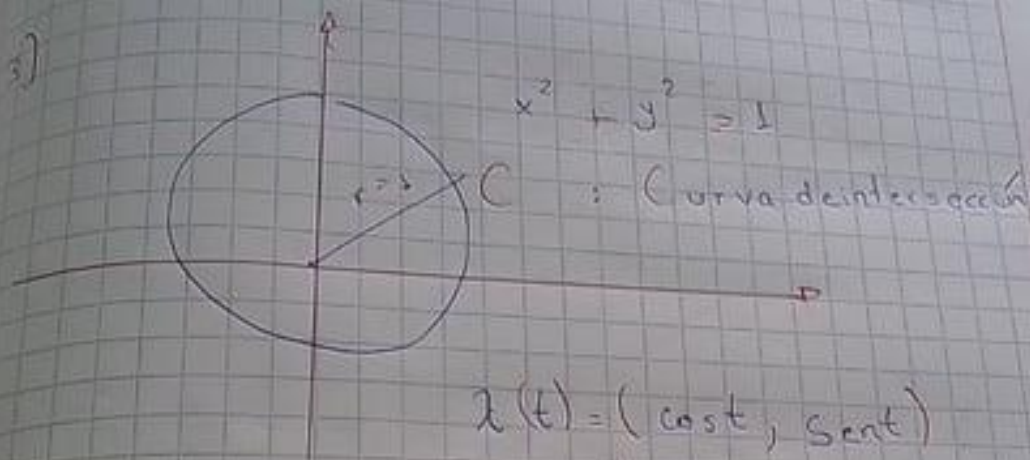


3)



$$\lambda(t) = (\cos t, \sin t)$$

$$0 \leq t \leq 2\pi$$

$$\oint_C xy \, dx + yz \, dy + xz \, dz$$

$$\rightarrow F(x, y, z) = (xy, yz, xz)$$

$$\rightarrow \lambda(t) = (\cos t, \sin t, 0)$$

$$0 \leq t \leq 2\pi$$

$$\rightarrow \lambda'(t) = (-\sin t, \cos t, 0)$$

$$\rightarrow F(\lambda(t)) = F(\cos t, \sin t, 0)$$

$$F(\lambda(t)) = (\cos t \sin t, 0, 0)$$

$$\oint_C F(x, y, z) \, dc = \int_0^{2\pi} (\cos t \sin t, 0, 0) \cdot (-\sin t, \cos t, 0) \, dt$$

$$\oint_C F(x, y, z) \, dc = \int_0^{2\pi} -\sin^2 t \cos t \, dt$$

$$\oint_C F(x, y, z) \, dc = - \int_0^{2\pi} \sin^2 t \cos t \, dt$$

$$\oint_C F(x, y, z) \, dc = \left[-\frac{\sin^3(t)}{3} \right]_0^{2\pi}$$

$$\oint_C F(x, y, z) \, dc = 0$$