Problema 10.2

$$F(x) = \int_{-1}^{x} \frac{t^3}{t^4 - 4}\, dt$$

Recta tangente en $x = 1$.

Recta tangente en $x = x_0$ (Taylor $n = 1$):

$$y = F(x_0) + F'(x_0) \cdot (x - x_0)$$

- Para $x_0 = 1$, calculamos:

$$F(1) = \int_{-1}^{1} \underbrace{\frac{t^3}{t^4 - 4}}_{\text{Impar}}\, dt = 0$$

$$F'(x) = \frac{x^3}{x^4 - 4} \Rightarrow F'(1) = -\frac{1}{3}$$

Recta tangente en $x = 1$:

$$\boxed{y = -\frac{1}{3}(x - 1)}$$