$$\int_0^{+\infty} \frac{e^{-x}}{1+x^2}\, dx$$

$$= \int_0^9 \frac{e^{-x}}{1+x^2}\, dx + \int_9^{+\infty} \frac{e^{-x}}{1+x^2}\, dx$$

$$= A + B$$

$$A \simeq simp.L\,(g, 0, 9, 160)$$

$$g(x) = \frac{e^{-x}}{1+x^2}$$

$$A = 0.62144480923$$

$$B = \int_{9}^{+\infty} \frac{e^{-x}}{1+x^2} \, dx$$

Cambio de variables. $Y = \frac{1}{x}$

$$B = \int_{0}^{1/9} \frac{e^{-1/y}}{1+y^2} \, dy$$

dos opciones

*) m-file $\boxed{\text{gauss}}$

o

*) m-file $\boxed{\text{Gauss Legendre}}$

$$B = 0.0000012517$$

$$A + B = 0.6214493439$$

insruccón integral de matlab

$$q = integral(g, 0, Inf)$$

$$= 0.6214496242$$