Complex Variable 作業 9　　2006 Full due to Dec.27.2006

Given a casual function　$f(t) = e^{-t}\cos(t), t > 0, otherwise\ \ f(t) = 0$

(1) Please find $f_e(t)$ and $f_o(t)$.

(2) Plot $f_e(t)$ and $f_o(t)$.

(2) Please find its Fourier transform.

(3) Check its Hilbert transform pair using complex integrals.