1.   **Given:** $f(t) = \begin{cases} 2e^{-3t}, t \geq 0 \\ 4e^{2t}, t < 0 \end{cases}$

      Find: $F(\omega)$. Hint: rewrite f(t) as a sum of $u(t)$ and $u(-t)$ functions and use tables.

2.   **Given:** $H(\omega) = \frac{6}{\omega^2+4}$

      Find: $h(t)$