1.

Given: $f(t) = \begin{cases} 2e^{-3t}, t \ge 0 \\ 4e^{2t}, t < 0 \end{cases}$ **Find:** $F(\omega)$. Hint: rewrite f(t) as a sum of u(t) and u(-t) functions and use tables.

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

Electrical & Computer Engineering, Virginia Military Institute