

Full Name: _____

EEE 5502 (Fall 2022) – Practice

Continuous-Time Fourier Transforms, 2022

Question #1: Determine the continuous-time Fourier transform (CTFT) or inverse CTFT for the following equations. Use the continuous-time transform tables on the course website.

(a) $x(t) = u(t + 2) - u(t - 2)$

(b) $x(t) = u(t) - u(t - 4)$

(c) $x(t) = e^{-t}u(t - 1) * e^{-2t}u(t)$

(d) $X(\Omega) = j\pi [\delta(\Omega - \pi/3) - \delta(\Omega + \pi/3)]$