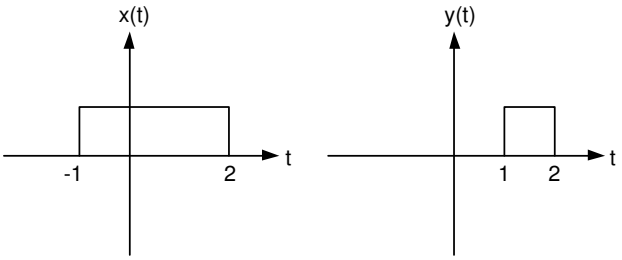
EE 204 218 Signals and Systems Laboratory 7

I. PREPARATION

1) Evaluate the following convolutions both in discrete time and continuous time.

a) $y[n] = u[n] * u[n-3]$
b) $y[n] = (\frac{1}{2})^n u[n-2] * u[n]$
c) $y[n] = (-1)^n * 2^n u[-n+2]$
d) $y(t) = (u(t) - u(t-2)) * u(t)$
e) $y(t) = (e^{-t}u(t)) * (e^{-3t}u(t))$

2) Find the convolution of the signals x(t) and y(t) by hand.



II. EXPERIMENTAL WORK

1) Write matlab programs that find the result of the convolutions in preparations 1 and 2. Compare them with your hand results.

Note: Use the matlab command conv to evaluate the convolution of two signals.

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