
```
%!-----
%! DSP Midterm 33
%! - Compute  $x(n) = \delta(n) + \delta(n-4)$  conv
%!       $y(n) = u(n) - u(n-3)$  using properties of FT
%!-----

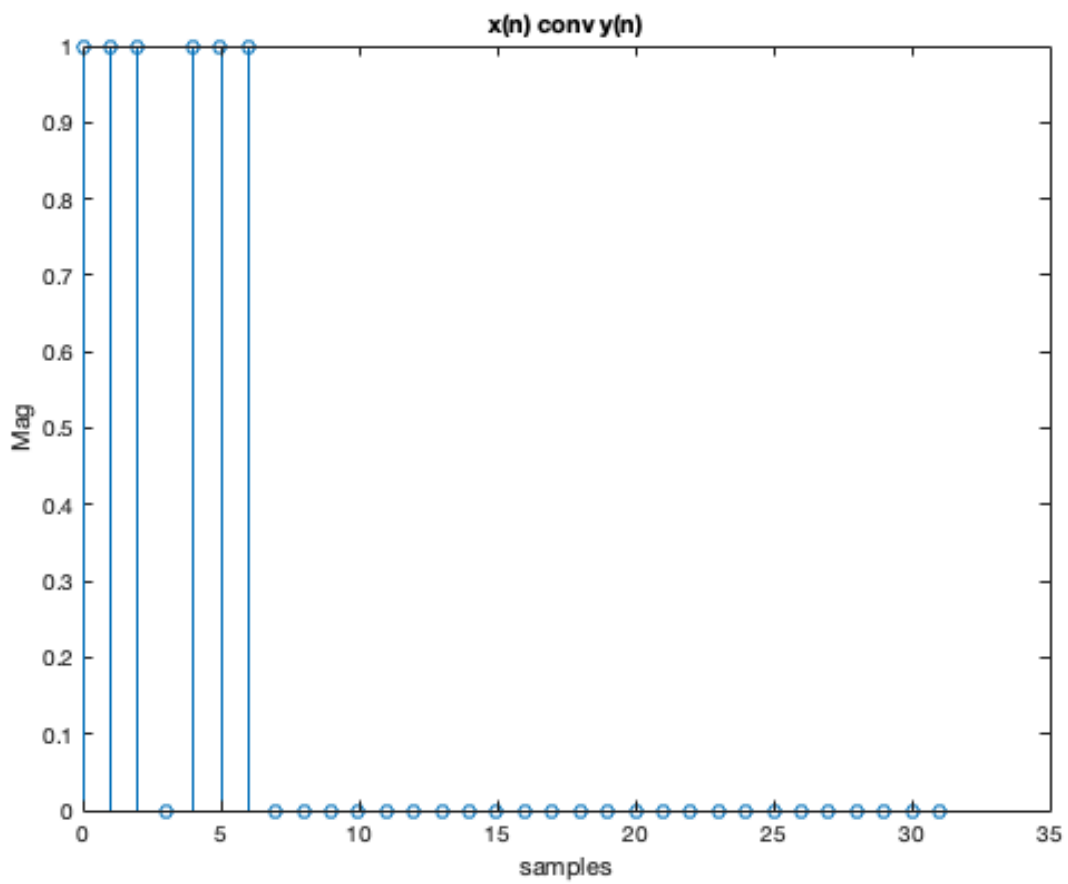
%! Enviornment
n = 0:31;

% Singal
x = impulse(0, n) + impulse(4, n);
y = unit_step(0, n) - unit_step(3, n);

% FFT
yf = fft(y);
xf = fft(x);
hf = xf .* yf;

% IFFT
h = ifft(hf);

% Plot
figure(1)
stem(n, h)
title('x(n) conv y(n)')
xlabel('samples')
ylabel('Mag')
```



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