



Sheet 3
Fourier Transform

1. Find the Fourier transform F.T. for the following signals:

a) $g(t) = A \text{rect}\left(\frac{t}{T}\right) + e^{-2t} u(t)$

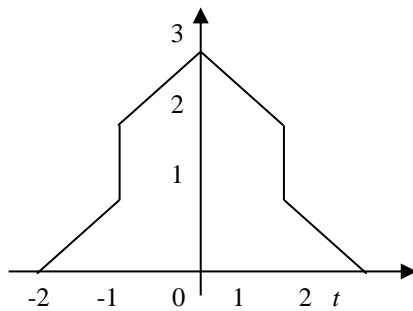
b) $g(t) = 2e^{-5t} u(t)$

c) $g(t) = A \text{sinc}(2Wt)$

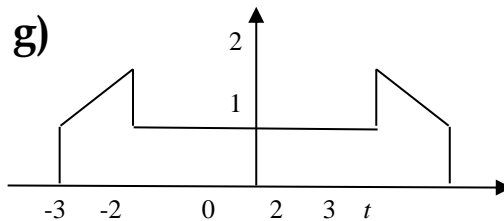
d) $g(t) = e^{-a|t-t_0|}$

e) $g(t) = Ae^{j2\pi f_c t} \text{rect}\left(\frac{t}{T}\right)$

f)



g)



2. Find the Fourier Series expansion for the following signals:

