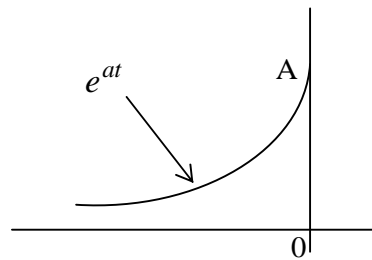
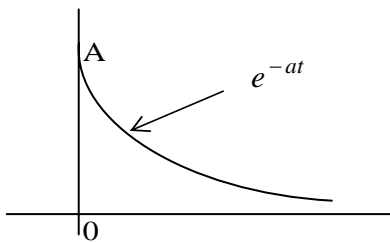
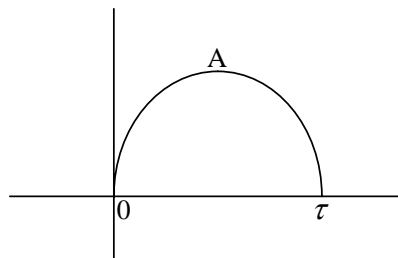
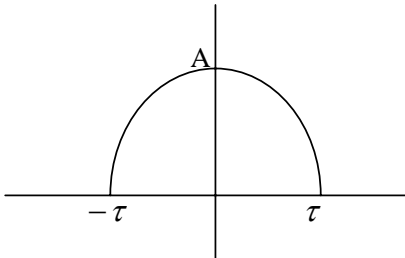
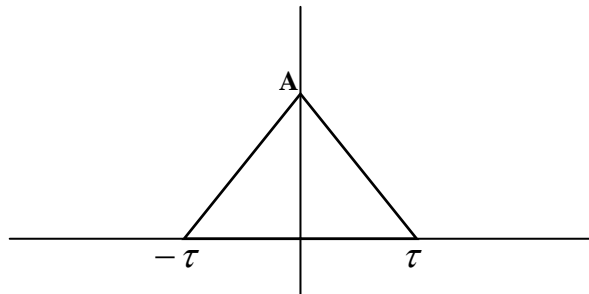
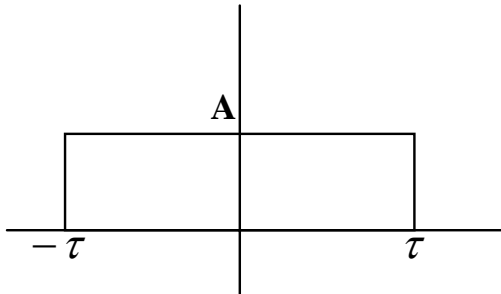




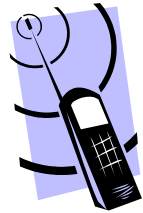
Sheet (3)
Fourier Transform

1- Find and plot the fourier transform for the following functions: (Form basic principle)



2- Find and plot FT for the following functions (using FT properties)

- $g(t) = \text{rect}\left(\frac{t-1}{2}\right) + \text{tri}\left(\frac{t-3}{3}\right)$
- $g(t) = 3.\text{rect}\left(\frac{t}{30}\right).u(t)$
- $g(t) = 3.\text{tri}\left(\frac{t+2}{2}\right)$
- $g(t) = 4.\text{rect}(0.5t - 1) + 4.\text{rect}(0.5t + 1)$
- $g(t) = \text{rect}\left(\frac{t}{10}\right).u(2-t)$
- $g(t) = 3.\text{rect}\left(\frac{t}{4}\right) + 2.\text{tri}\left(\frac{t}{2}\right)$



Good Luck,