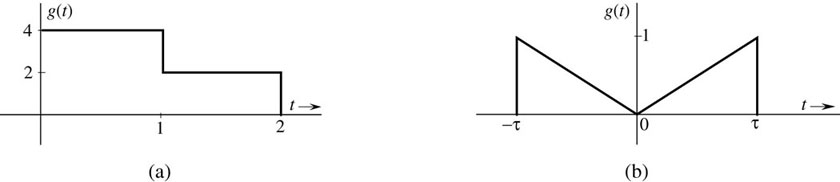
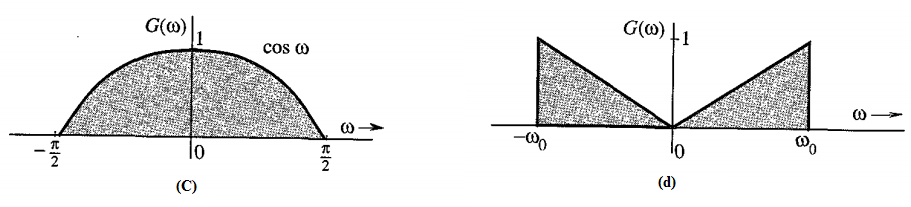
**Sheet 4**

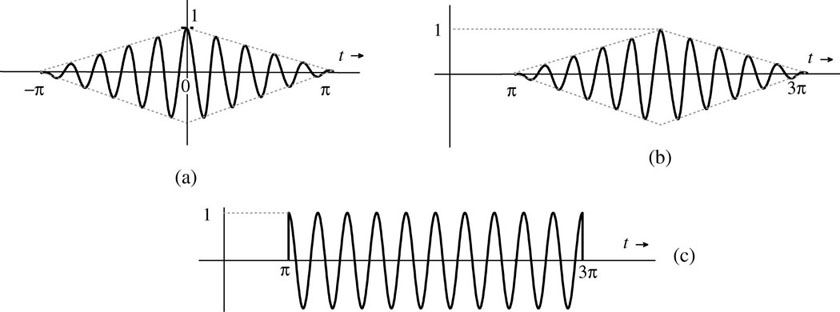
1. find the Fourier transforms of the signals shown in Figure below:



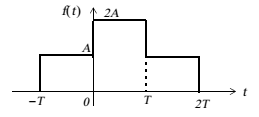
1. find the inverse Fourier transforms of the spectra shown in Figure below:



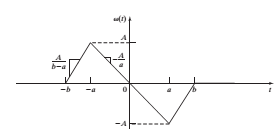
1. Drive the Fourier transform of :
2. Drive the Fourier transform of :
3. The signals in Figure are modulated signals with carrier. Find the Fourier transforms of these signals using the appropriate properties of the Fourier .Sketch the amplitude and phase spectra for parts (a) and (b). Hint: These functions can be expressed in the form.



1. Drive the Fourier transform of the waveform in the figure:



1. Using the differentiation property of Fourier transform find the frequency spectrum of :



**Good Luck**