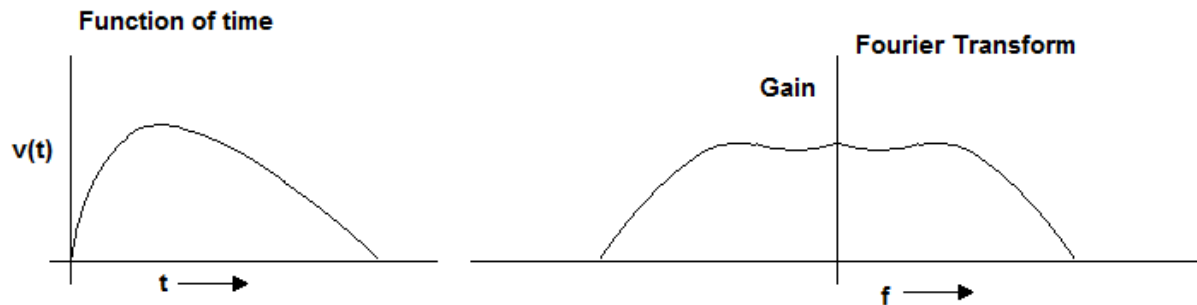
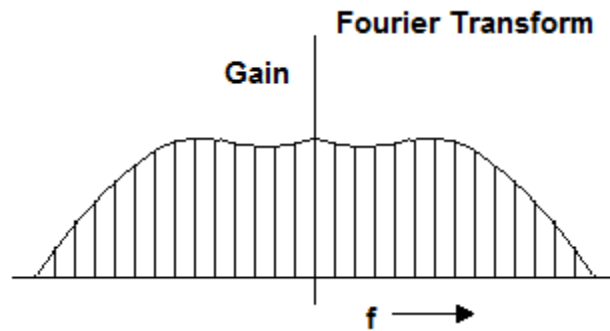


1. Suppose you have the function of time shown below and the corresponding Fourier transform. If you sample the Fourier transform at some regular interval as shown in Figure 2 and take the inverse DFT of the result what will you get in the time domain?



**Figure 1**  
A time domain signal and its corresponding Fourier transform.



**Figure 2**  
Samples are taken of the Fourier transform and the IDFT is used to find a time domain signal corresponding to the sampled Fourier transform.