



정보통신 수학 및 실습

Lab assignment



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Chapter 11 Lab Assignment

1. Find the Fourier transform of the following function using the numerical method.
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 - a) Plot the magnitude of the Fourier Transform of the signal when $A=10$, $a=10$.
 - b) Plot the magnitude of the Fourier Transform of the signal when when $A=10$, $a=50$ on the top of the figure a.
 - c) Describe what you find through problem a and b.
2. Solve the following questions about the magnitude of the continuous time Fourier transform of $x(t) = \exp(-A^* \text{abs}(t))$. Use the numerical method. A is 5.
 - a) Plot $x(t)$ when $-5 < t < 5$.
 - b) Plot the magnitude of the continuous time Fourier transform of $x(t) = \exp(-A^* \text{abs}(t))$.
3. Plot the magnitude of the continuous time Fourier transform of $x(t) = 1$ when $-4 < t < 4$, and $x(t)=0$ otherwise.