

Discussion problem assignment:

第一题:

Do partial fraction expansion to get the parameters A, B and C.

$$H(j\omega) = \frac{2j\omega - 4}{(j\omega + 1)(j\omega + 2)^2} = \frac{A}{j\omega + 1} + \frac{B}{(j\omega + 2)^2} + \frac{C}{j\omega + 2}$$

第二题:

Compute the following integral

$$\int_{-\infty}^{+\infty} \frac{\sin(2\omega) \sin(\omega)}{\omega^2} d\omega = ?$$

$$\int_{-\infty}^{+\infty} \frac{\sin(2\omega) \sin(\omega)}{\omega^2} e^{j\omega} d\omega = ?$$