Homework assignments for chapter four:

4.1(a), 4.2(b), 4.3(a), 4.6, 4.7(a), 4.10, 4,12, 4.14, 4.21, 4.22(a)(d), 4.25, 4.32(b), 4,35(a), 4.36, 4.43

Discussion problem assignment:

第一题：

For an aperiodic signal $x_0(t) = e^{-t}u(t)$, prove that $x(t) = \sum_{n=-\infty}^{+\infty} x_0(t - nT)$ is a periodic signal with fundamental period *T*. Let $x_0(t) \leftrightarrow X_0(j\omega)$, $x(t) \leftrightarrow a_k$, confirm that $a_k = \frac{1}{T} X_0(jk\omega_0)$.

第二题：

Question: compute $\int_{-\infty}^{0} \frac{\sin t}{t} dt = ?$