

**Chapter 7, Problem 31.**

Evaluate the following integrals:

(a)  $\int_{-\infty}^{\infty} e^{-4t^2} \delta(t-2) dt$

(b)  $\int_{-\infty}^{\infty} [5\delta(t) + e^{-t} \delta(t) + \cos 2\pi t \delta(t)] dt$