

**Concept Question 2-7:** Describe the time-shift property of convolution.

Time-shifting each of two signals to be convolved leads to time-shifting their convolution by the sum of the time shifts, as described in Eq. (2.72):

If  $h(t) * x(t) = y(t)$ , then

$$h(t - T_1) * x(t - T_2) = y(t - T_1 - T_2).$$