

**Concept Question 7-13:** What is the difference between a time delay and a right shift?

For a causal signal  $x[n]$  given by  $x[n] = x[n] u[n]$ , its right shift by  $m$  is  $x[n - m] u[n - m]$ .

For a noncausal signal  $x[n]$ , its time delay by  $m$  is  $x[n - m] u[n]$ . See Example 7-15 for more details.