

Concept Question 7-6: What is the difference between AR and MA systems?

In an AR system, the output at present time is computed from the output at a finite number of past times, together with the input at present time. Example:

$$y[n] = -2y[n - 1] - 3y[n - 2] + 4x[n].$$

In a MA system, the output at present time is computed from the inputs at a finite number of present and past times. Example:

$$y[n] = 2x[n] + 3x[n - 1] - 4x[n - 2].$$