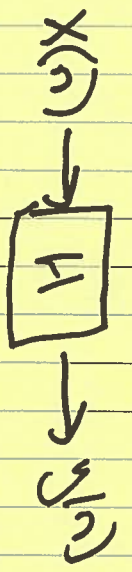
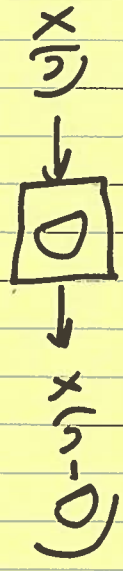


Lecture 4 Sample Processing methods:



H denotes a linear, time-invariant system

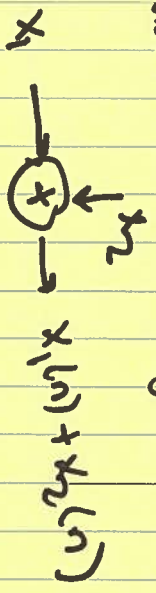


a delay

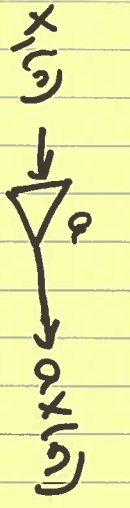


single sample delay

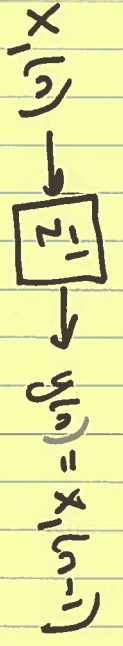
Basic DSP building blocks are:



adder



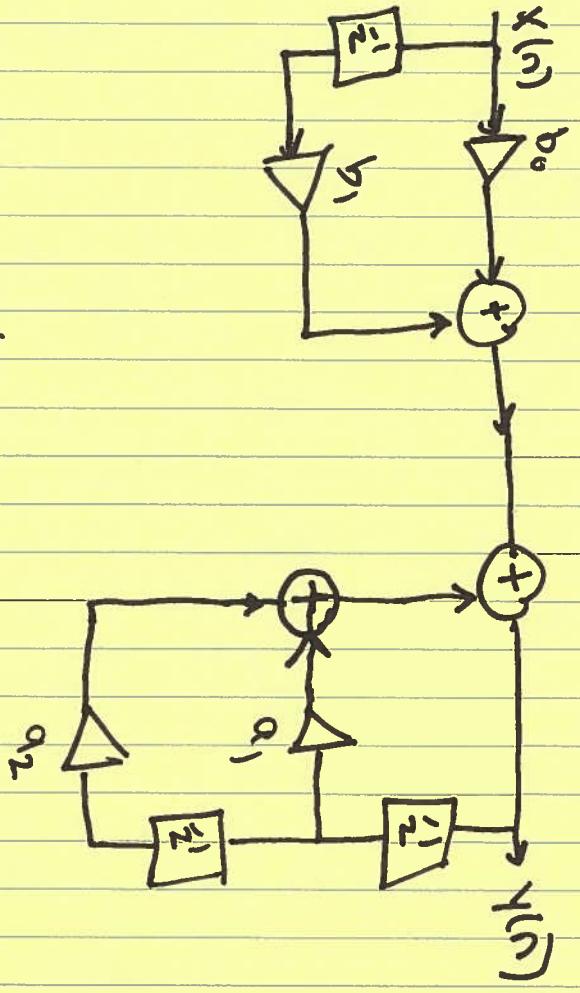
gain amplifier



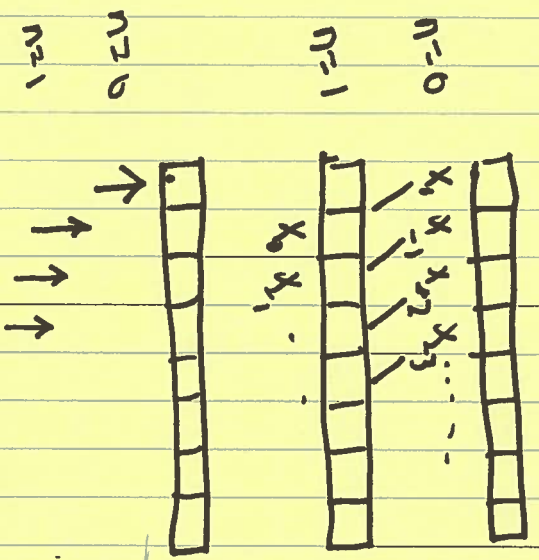
delay

$$y(n) = a_1 y(n-1) + a_2 y(n-2) + b_0 x(n) + b_1 x(n-1)$$

Direct Form Realization:



Circular Buffer:



buf
start : buf
buf + i

