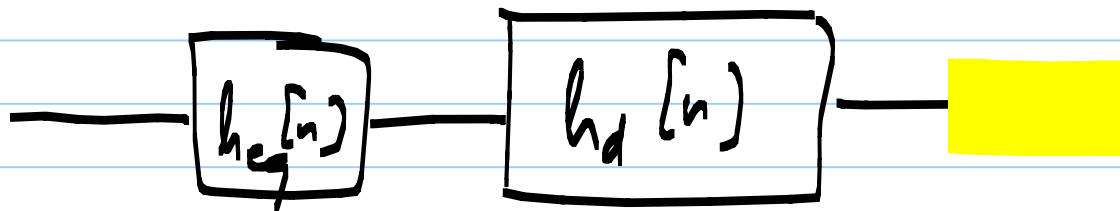
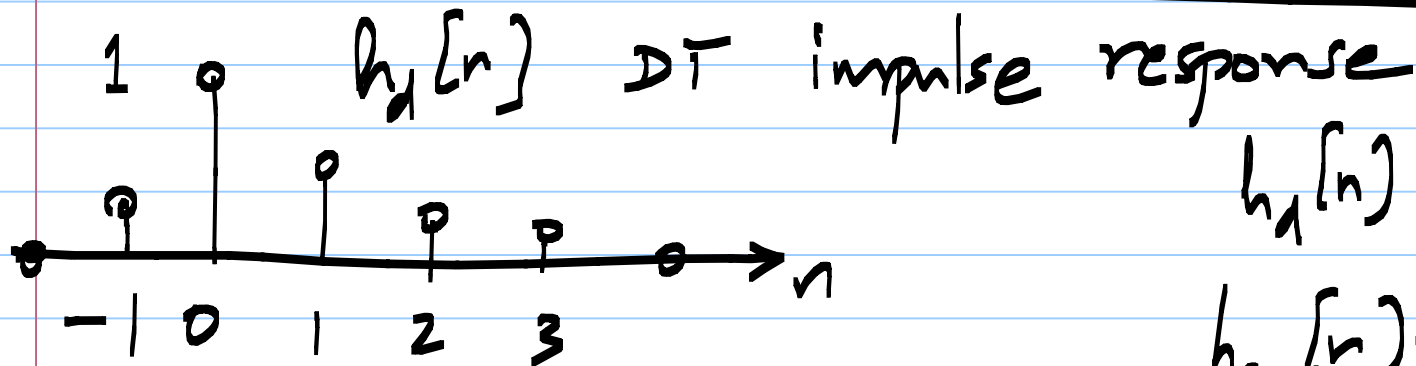


# Decision feedback equalization



$h_{eq} * h_d$  : minimum ISI

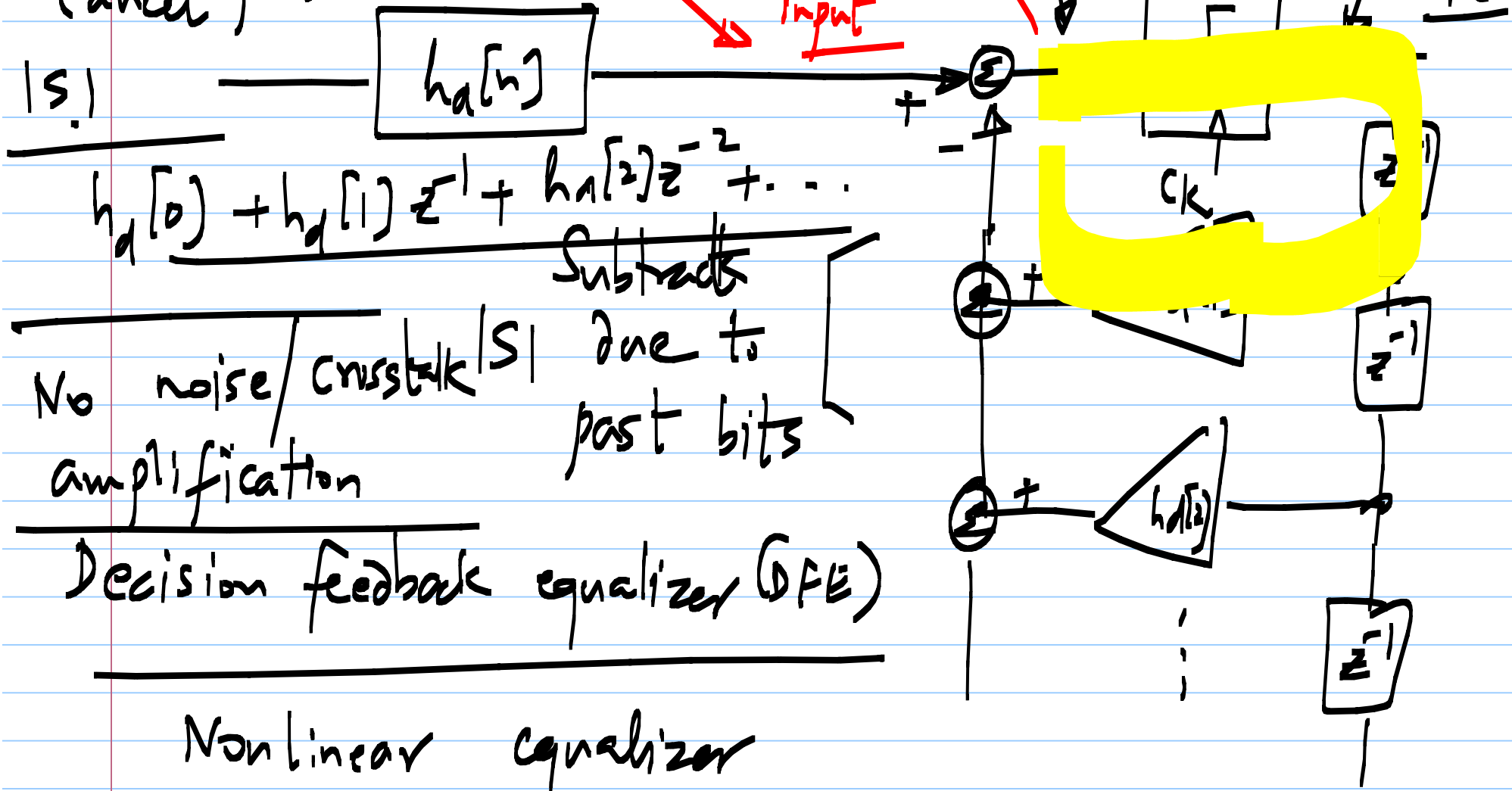
Can only cancel post-cursor

Noise, crosstalk same as the input  $a_k$

No ISI

Sllicer

No noise



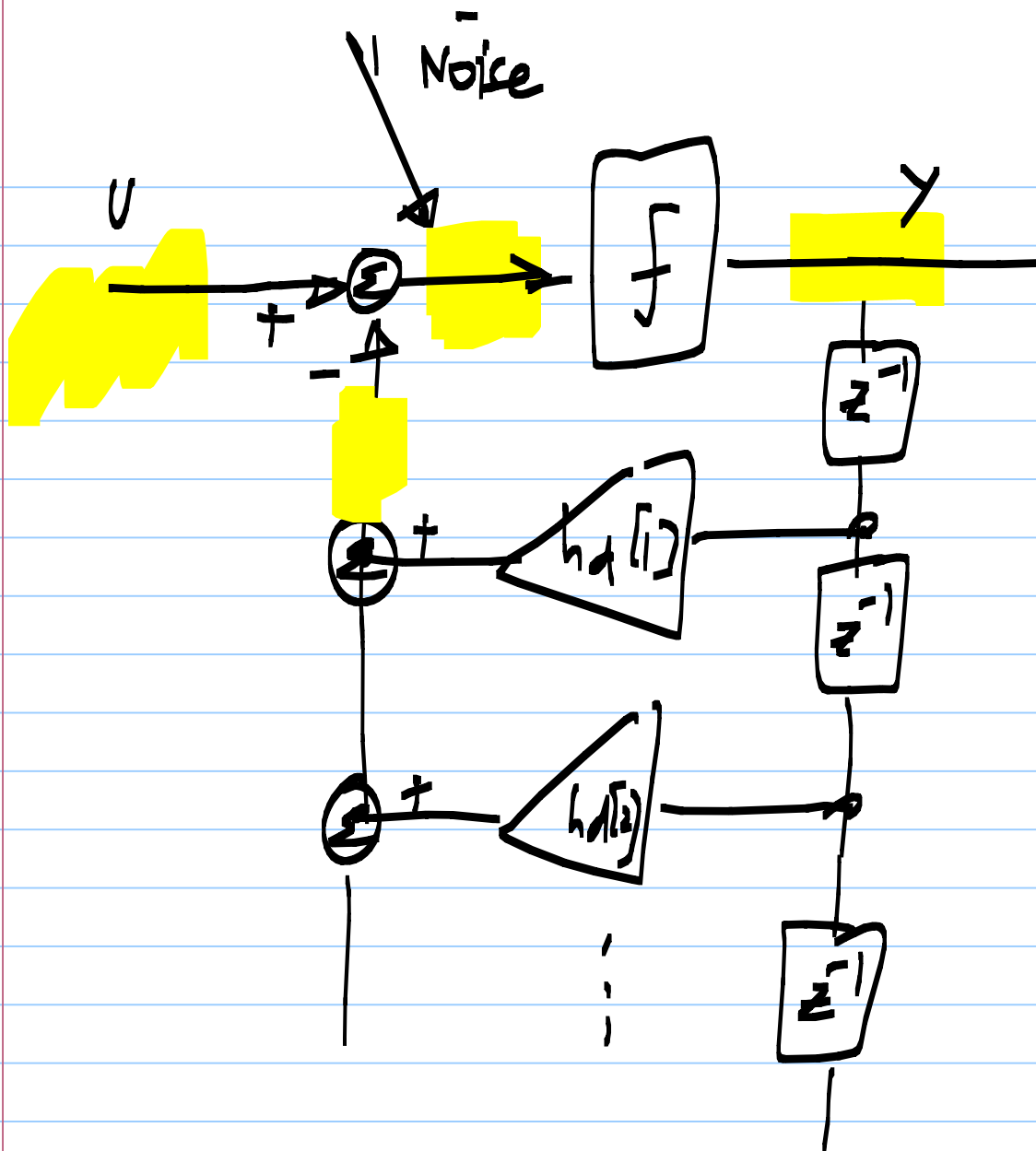
$$h_d[0] + h_d[1]z^{-1} + h_d[2]z^{-2} + \dots$$

Subtracts

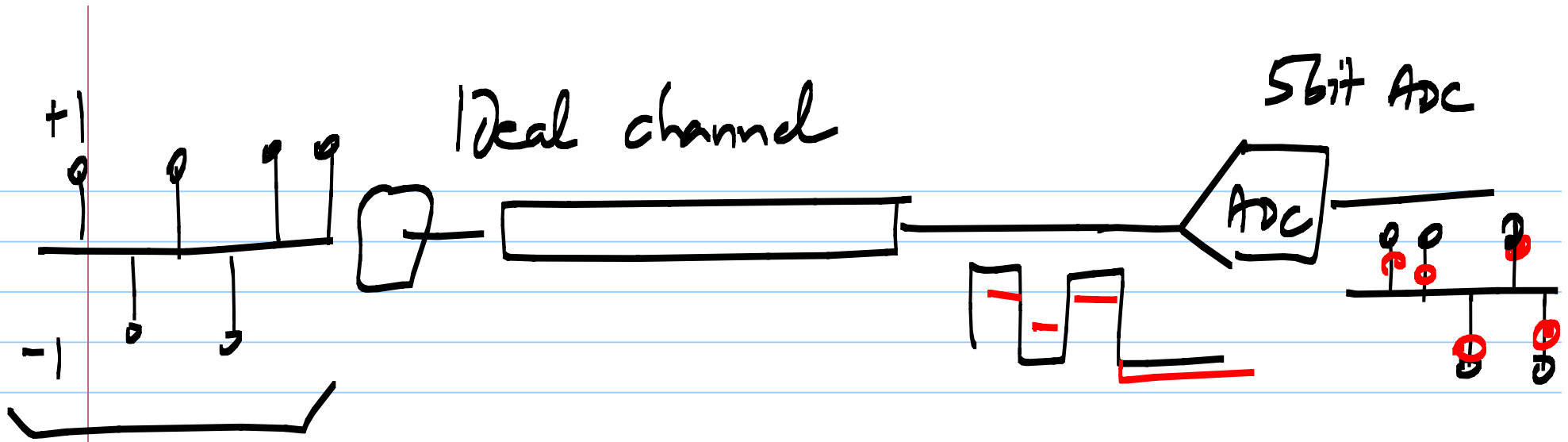
No noise/crosstalk/ISI due to amplification post bits

Decision feedback equalizer (DFE)

Nonlinear equalizer



$$\frac{y}{u} = \frac{1}{1 + h_d[1]z^{-1} + h_d[2]z^{-2} + \dots}$$



31

20

0

10

# DFE Implementation:

