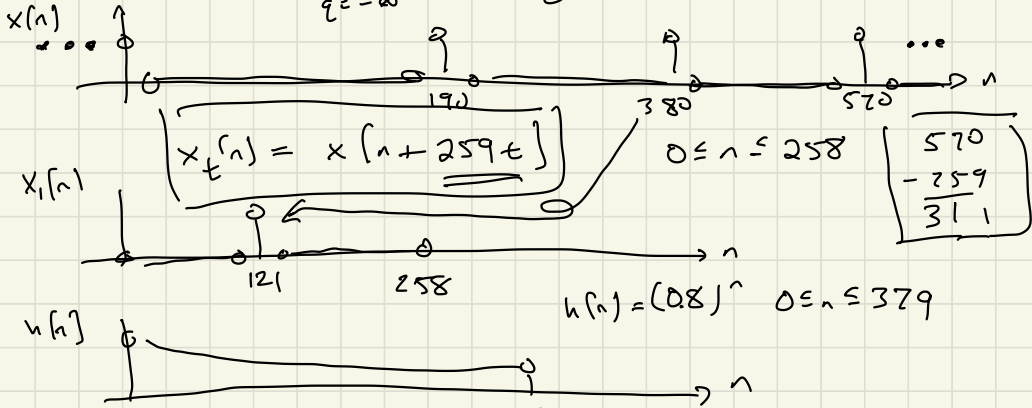


2024 November 4

$$x[n] = \sum_{q=-\infty}^{\infty} \delta[n - 190q]$$



$$y_1[n] = h[n] \otimes_{1024} x_1[n], \quad \text{find } \boxed{y_1[n - 259]}.$$

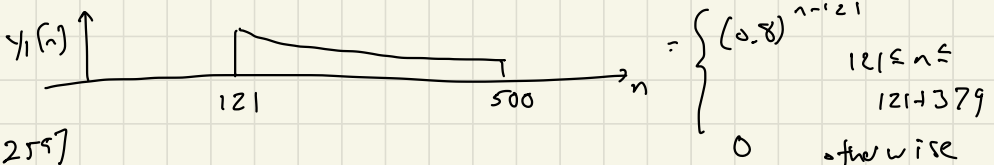
$$\text{len}(x_1) = M = 259$$

$$\text{len}(h) = L = 380$$

$$\text{len}(y_1) = L + M - 1 = \underline{639} \leq N = 1024$$

$$\Rightarrow h[n] \otimes x_1[n] = h[n] * x_1[n]$$

$$x_1[n] = \delta[n - 121] \rightarrow \boxed{9} \rightarrow y_1[n] = h[n - 121]$$



$$y_1[n - 259]$$

