

$$(X[n] = 1) \Leftrightarrow \left(x[k] = \sum_{m \in \mathbb{Z}} \delta[k - mK] \right) \Leftrightarrow \left(\begin{cases} x[0] = 1 \\ x[k] = 0, \quad k \in [1 \dots K - 1] \end{cases} \right)$$