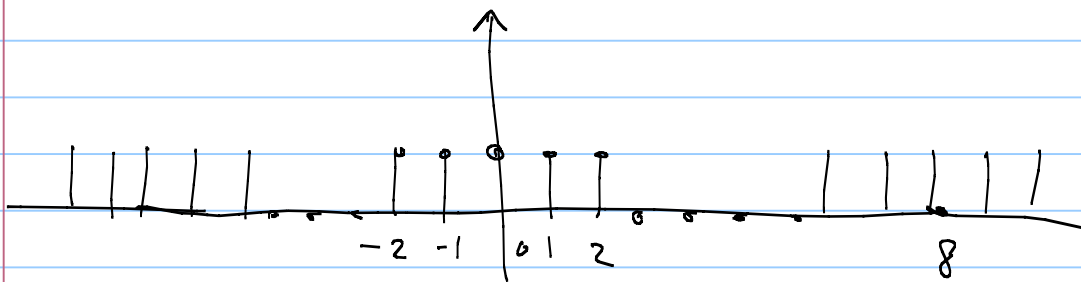


$$x[2n] \text{ \& \& } x[n]$$

Then FS coefficients are not related, in general.

$$y[n] = \begin{cases} x\left[\frac{n}{m}\right] & n = 0, \pm m, \pm 2m, \dots \\ 0 & \text{otherwise} \end{cases}$$

What is the relationship between FS
coeff. z $x[n]$ & $y[n]$?



$$a_k = \frac{1}{8} \sum_{n=-2}^2 1 \cdot e^{-j k \frac{2\pi}{8} n}$$

$$= \frac{1}{8} \frac{\sin \frac{5\pi k}{8}}{\sin \frac{\pi k}{8}}$$

For $N=32$

$$a_k = \frac{1}{32} \frac{\sin 5\pi k/32}{\sin \pi k/32}$$

Plot a_k vs k

a_k vs. frequency