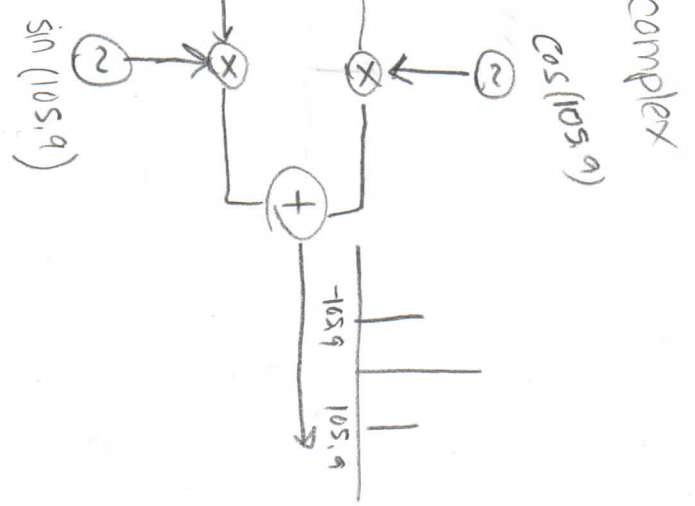
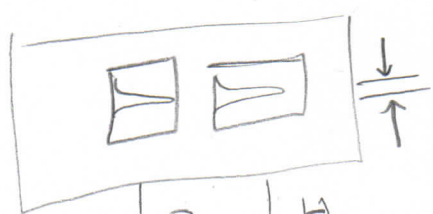


Let's say $f_n = 100$
 CONSTANT DDS's here on this side



DDS
 Highly quantized sinusoid and steps throughout depending on rate
 WEAVE R3 in article

DDS
 can have 1 real in and 2 F/Q out does cos/sin

Audio CLK
 master CLK
 100 MHz

400 samples filter coefficients

800 samp/sec

$$= \frac{1}{20} = 50 \text{ ms}$$

$$\frac{1}{10} = 100 \text{ ms}$$

10ns = 100 MHz

so, really 800 taps = 50ms
 bandwidth is how long the delay is

Each DDS here would be custom but could take in the steps as an arg in real time

OR use
 DDS (... , f_c);
 variable DDS want to shift up to