- Install run time engine program to operate the Function Generator, Oscilloscope and Dynamic Signal Analyzer as shown in figure below.

- To run the Functions Generator press the ⇨ from the tool bar, Then press the ➡ from the Function Generator as illustrate in Fig(1), then set the values shown in the table()

Fig(1)

➤ Set up the Function Generator, Oscilloscope and Dynamic Signal analyzer and set all as shown in table:

Wave Form Shape	Sinusoidal
Frequency	2KHz
Amplitude	4.00 Vp-p

set the values for the Scope as follows

	Channel 0	Channel 1
Volts/Div	1 V	1 V
DC offset	0 V	0 V
Time/Div	200µ sec	

set the values for the DSA as follows

| Input Settings	Source Channel to Channel 1
FFT Settings	Frequency span to 45,000
	Resolution to 400
	Windows to 7 term B-Harris
Trigger Settings	Edge
Frequency Display	Units to dB
	Mode to RMS
	Scale to Auto
Averaging	Mode to RMS
	Weighting to exponential
	# of averages to 3

Table (1)

Run the Oscilloscope at Ch0 and sketch the input signal.
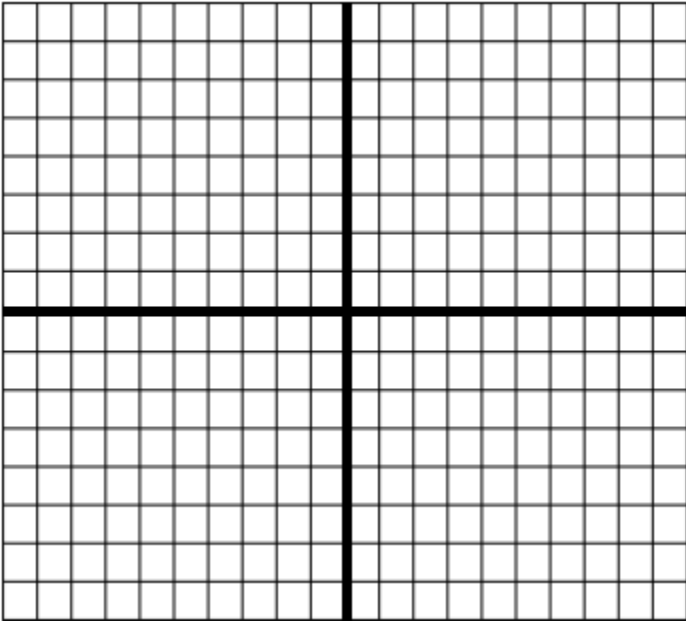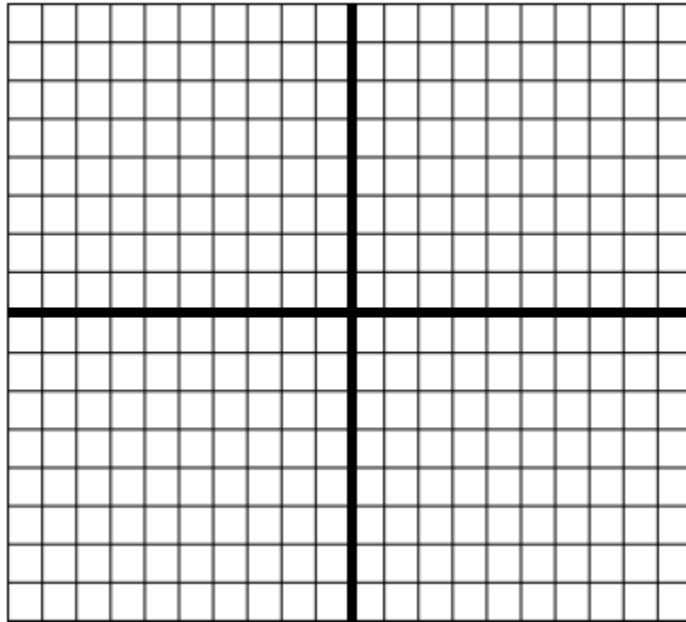

Record V_{p-p}:

➢ Run the dynamic signal analyzer and Sketch the input power signal.
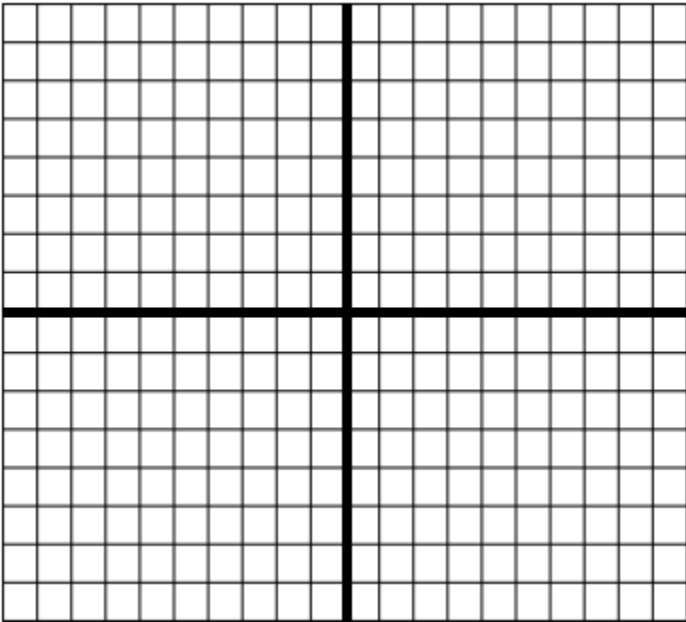
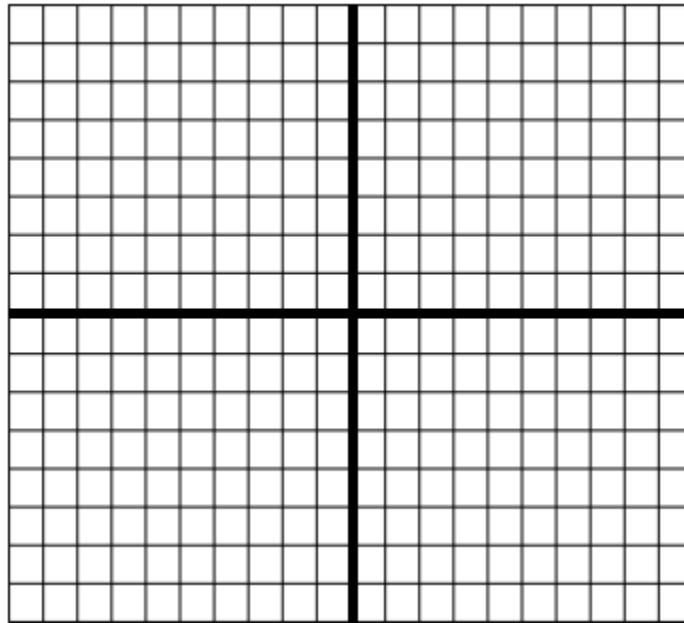Determine the power signal for the input signal in dBV_{rms} value at:

Frequency (Hz)	Power dBV_{rms}
15K	
20K	
25K	
30K	
35K	

Change to the Ch1(output) and Sketch the output signal:

Record Vout$_{p-p:}$

Sketch the output power signal:

Determine the output power signal in dDV_{rms} at value:

Frequency (Hz)	Power dBVrms
15K	
20K	
25K	
30K	
35K	

Sketch the input and the output signal (ch0, ch1) dual.
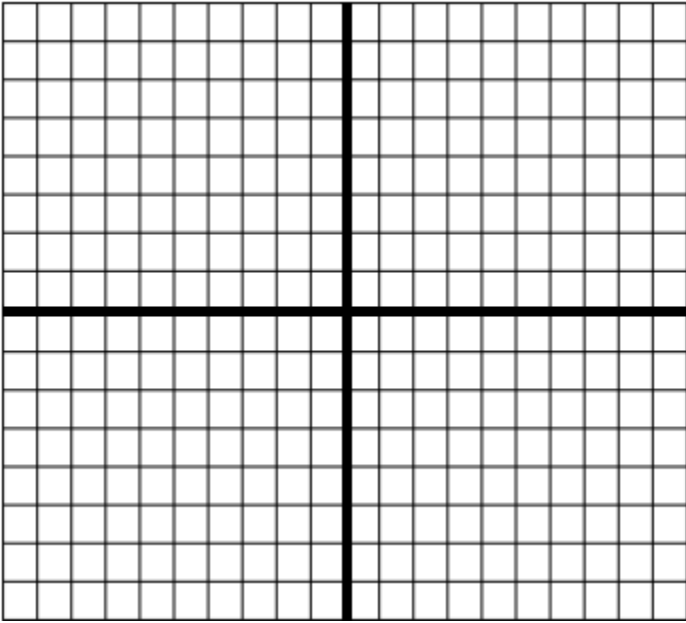
aliasing

Determine the frequency of the first six aliases in the sampled message.

1-

2-

3-

4-

5-

6-

Sketch the first aliasing waveform: