5. Digitally Sampling a Sine Wave (Lab Activity, Week 1)

Setups

F_Data: Nyquist Criterion	
Cabling	3X Mini Circuits 15542 50 Ohm Resistors
Sample Rate	2.2MHz
VPP	100mV=0.1V
Nyquist Criterion condition	2.2MHz>=2 Observed Freq

G_Data: Convolution of 2 Sin Waves	
Function Generators	A:FG___ B:FG___ C: Oscilloscope___
Cabling	3X Mini Circuits 15542 50 Ohm Resistors
Sample Rate	2.2MHz
VPP	100mV=0.1V
Sine Wave 1	700KHz
Sine Wave 2	704KHz to 710KHz
VPP	100mV

N_Data: No Noise	
VPP	100mV

NN Data: Noise	
50 Ohm Machine	
5 Sets of Noise data points	10,000 Points
VPP	100mV