Prelab 2

Jaiden Gann

June 8, 2022

Part 1:inverting op-amp

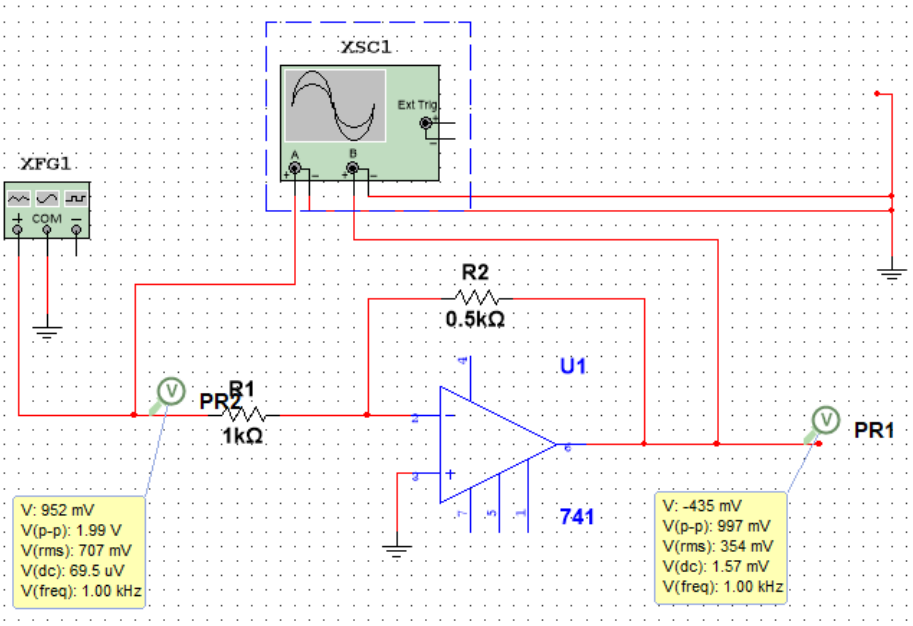

Figure 1. Inverting op-amp circuit diagram

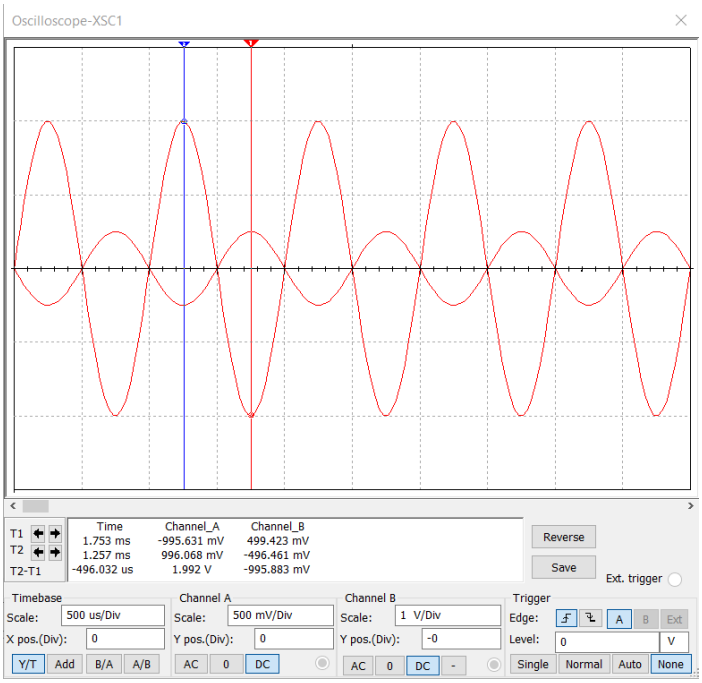

Figure 2. Input and output waveforms for Figure 1

Table 1. Simulation results for inverting op-amp

V_{INpp}(V)	R_{IN} (kΩ)	R_F (kΩ)	V_{OUTpp} (V) O-Scope	Gain (v/V)	V_{OUTrms} (V) DMM
2	1	0.5	1.992	0.5	0.354
		1	1.993	1	0.707
		2	1.993	2.079	1.47
		3	1.992	2.26	1.60
		4	1.991	2.51	1.78

Part 2:non-inverting op-amp

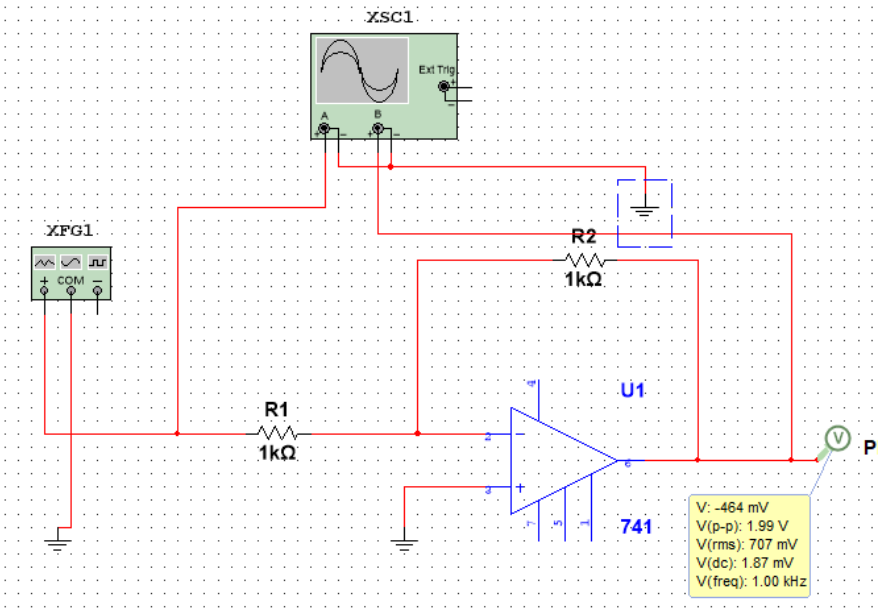

Figure 3. Non-inverting op-amp circuit diagram

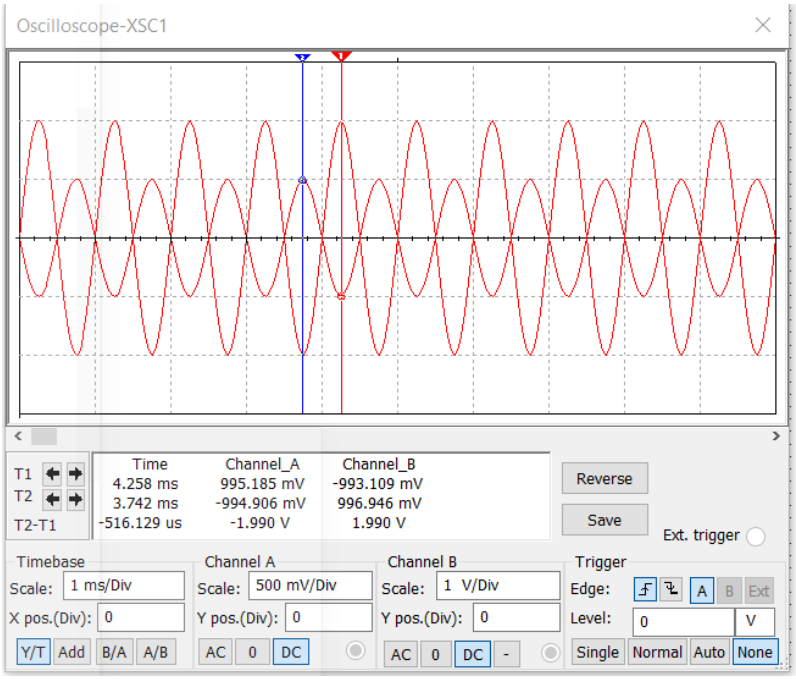

Figure 4. Input and output waveforms for Figure 3

Table 2. Simulation results for non-inverting op-amp

V_{INpp}(V)	R_{IN} (kΩ)	R_F (kΩ)	V_{OUTpp} (V) O-Scope	Gain (v/V)	V_{OUTrms} (V) DMM
2	1	0.5	1.991	0.5	0.354
		1	1.990	1	0.707
		2	1.990	2.12	1.50
		3	1.993	2.33	1.63
		4	1.989	2.51	1.78

The numbers I got for V_{OUTpp} seem wrong to me for both non-inverting and inverting and am not sure I measured it correctly.