Table 1: Measured Gain Values

Variable	Measured Gain Value $A_{v,x}$	$A_{v,e}$	Percent Differences
$A_{v,a}$	-6.92	-6.583	5.119%
$A_{v,b}$	-5.64	-6.583	14.3248%
$A_{v,c}$	-6.714	-6.583	1.98997%

Part B had high enough voltages that clipping occurred resulting in the amplification

$$V_{m,max,exp} = 2.105$$
$$V_{m,max} = 2.25V$$

A large contribution to why this could be lower is that the resistor  $R_f$  was lower

than expected. It was the best one to be found. The  $V_o(t)$  for the first and third setup were close to predicted, but the second was very far off. The predicted value for  $V_o(t)$  is -6.666, were the second setup had a  $V_o(t)$  magnitude of -16.4575.

The assumption that it is an ideal op-amp is a ok one. There a a few inconsistencies here or there but for the most part it would work. Most of the errors are with in 10% meaning predictability is consistent.