

| | | | | | | | | | | |
|----|--|--|--|--|--|--|--|--|--|-------|
| ID | | | | | | | | | | Name: |
|----|--|--|--|--|--|--|--|--|--|-------|

Post-Lab Questions (2 marks in total, 2/3 marks for each question):

- (1) By examining your plots on Graph (1.3), answer the following:
- What are the effects of the dc-supply voltages on the voltage-transfer characteristics?
 - Would the solo Op-amp qualify as a practical amplifier circuit? Comment on your answer.

a) The amplification is steep compared to other graphs

b) no because it does not amplify the signal smoothly (there is distortion in the amplification)

- (2) By considering your plots on Graphs (1.3), (1.4) & (1.5), answer the following:
- What does the application of negative feedback (around the Op-amp) have on the amplifier-circuit behavior?
 - Does the application of negative feedback have any effect on the output saturation voltages? Comment on your answer.

a) less distortion in the amplification

b) the graph flips so it starts with the +ve saturation and decreases to the -ve saturation

- (3) By comparing the results of your investigation of the inverting and non-inverting configurations, answer the following:
- What is the most desirable feature of the inverting configuration, and what is its weakest characteristic?
 - What is the most desirable characteristic of the non-inverting configuration?
 - What is that desirable feature that both configurations enjoy relative to no Op-Amp circuits? [Hint: Think about the effects of connecting circuits in cascade.]

a) ①
② low cost

b) high input impedance to protect damage to the circuit