**Laboratory Report Cover Sheet   
DeVry University  
College of Engineering and Information Sciences**

**Course Number:** REET 420

**Professor:**

**Laboratory Number:** 3

**Laboratory Title:**  Power Op Amps

**Submittal Date:** Click here to enter a date.

***Objectives:***

***Results:***

***Conclusions:***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Team:*** |  |  |  |  |  |
|  | Name |  | Program |  | Signature |
|  |  |  |  |  |  |
|  | Name |  | Program |  | Signature |
|  |  |  |  |  |  |
|  | Name |  | Program |  | Signature |

***Observations/Measurements:***

# The class A common drain amplifier

### Paste the diagram of the simulation of the circuit shown in the ilab below:

### Verify the dc and ac performance of the amplifier:

### Determine how large the output can be before it begins to distort:

1. Calculation of the power required by the supply and the power delivered to the load:

# The push amplifier

### Paste the diagram of the simulation of the circuit shown in the ilab below.

### Verify that the transistor is biased at *ID* = 0 Adc :

1. Calculate the gate voltage, *vg,* when V1 = 40 *Vp*.:

### Report the voltage and current readings:

### Show the graph of the voltage across the output resistor, *R3*.:

### Calculate the power dissipated by the load when V1 = 40 *Vp*.:

# The inverting amplifier using a push-pull configuration

### Paste diagram of design from Multisim

# D. Questions/Discussion

### Explain how to properly configure a class A amplifier to produce very little distortion.

### Explain the common ways to protect your amplifier design from catastrophic failure.

### .

***Grade:***

|  |  |  |
| --- | --- | --- |
| **Deliverable** | **Points Available** | **Points Achieved** |
| Laboratory Cover Sheet | 6 |  |
| Calculations/Measurements | 12 |  |
| Questions | 6 |  |
| **Total Points** | 24 |  |
|  | | |
| Comments: | | |