

**ECE 2201
Term A-2023**

Problem Set 5

Due: Monday, October 2, 2023

(1) You must show all work to receive credit. Answers alone are not sufficient.

(2) The book problems may have been used before and I am sure solutions are floating about. Be sure you know how to do these problems **ON YOUR OWN**, since you will be tested in each area.

MOSFET Amplifier

Section 7.1 – Basic [Transistor Amplifier] Principles (pg. 475)

1. 7.1 Fig. 7.2(a) is on page 369.
2. D7.2

Section 7.2 – Small Signal Operation and Models (pg. 478)

3. 7.24 Ignore part (e).
4. 7.25 Ignore part (d).

Section 7.4 – Biasing (pg. 487)

5. D7.92 Fig. 7.50(c) is on page 450.

Introduction to BJT's

Section 6.1: BJT Device Structure and Physical Operation (pg. 355)

6. 6.1
7. 6.2
8. 6.15 *Good practice here!*

Section 6.2: Current-Voltage Characteristics (pg. 359)

9. 6.35
10. 6.48

Section 6.3: BJT Circuits at DC (pg. 361)

11. 6.51
12. D6.55 *Practice using Voltage-Divider Bias.*