

The University of Portland
Donald P. Shiley School of Engineering

EE352
Electronic Circuits II
HOMEWORK 5

Assigned: Mon, Feb 24, 2020

Due: Fri, Mar 13, 2020

Problems:

- 1) Text 11.3
- 2) A negative feedback closed-loop amplifier employs an internal open-loop basic amplifier with input and output resistances each of $1\text{k}\Omega$ and gain $A=1000\text{V/V}$. The closed-loop amplifier has a feedback factor of $\beta=0.1\text{V/V}$. Sketch the closed-loop feedback amplifier block diagram. For the closed-loop amplifier, find the gain, A_f , the input resistance, R_{if} , and the output resistance, R_{of} .
- 3) Text 11.18
- 4) Text 11.22
- 5) Text 11.24