

Homework 6 – Due Wednesday 11/2/2016

Problems (not review questions): **9.1, 9.5, 9.6, Exercise 9.5** (page 611), **Exercise 9.17** (page 648) – where $G_m = g_{m1,2}$, $R_o = r_{o2} || r_{o4}$, **Exercise 9.20** (page 657)

Solutions for odd problems are on mycourses: Book_solutions.pdf,

Answer for 9.6: $R_D = 4 \text{ k}\Omega$, $(W/L)_{1,2} = 44.4$, $(W/L)_3 = 88.8$, $(W/L)_4 = 22.2$, $R = 12.5 \text{ k}\Omega$, $V_{CMmin} = -0.2 \text{ V}$, $V_{CMmax} = 0.5 \text{ V}$

Answers for exercises (9.5, 9.17, 9.20) are given in the book in pages 622, 648, and 657.

EEEE381 HOMEWORK FORMAT GUIDELINES

GENERAL: NEATNESS AND ORGANIZATION WILL BE GRADED. THE SAME GUIDELINES SHOULD BE FOLLOWED FOR EXAMS.

- ALL HOMEWORK IS TO BE HANDED ON ENGINEERING GRAPH PAPER or PLAIN WHITE PAPER (8.5 inch x 11 inch).
- NUMBER EACH PROBLEM INCLUDING CHAPTER IT COMES FROM
- HIGHLIGHT EACH FINAL ANSWER WITH A BOX AND INCLUDE APPROPRIATE UNITS.
- INCLUDE YOUR NAME ON EVERY PAGE
- ALL PROBLEMS SHOULD BE TURNED IN, IN ORDER!
- IF WORK IS NOT LEGIBLE, IT WILL NOT BE GRADED
- CROSS OUTS ARE NOT ACCEPTABLE. USE A PENCIL AND ERASER OR PEN AND WHITE-OUT. (Green-out?)
- PRESENT SOLUTION IN A FORMAT THAT PROCEEDS FROM LEFT TO RIGHT, TOP TO BOTTOM. IF ORGANIZATION OF SOLUTION IS NOT CLEAR, PROBLEM WILL NOT BE GRADED.
- PROVIDE A CONCISE DESCRIPTION OF YOUR METHOD OF SOLUTION. IF NONE IS PROVIDED, NO PARTIAL CREDIT WILL BE AFFORDED.
- PROVIDE AN APPROPRIATELY LABELED CIRCUIT DIAGRAM. IF CIRCUIT IS MODIFIED, INCLUDE MODIFIED DIAGRAM(S).
- MAKE SURE ALL PAGES ARE ATTACHED TO EACH OTHER SECURELY. STAPLES ARE A CLASSIC WAY TO DO THIS.
- -REMEMBER- HOMEWORK ASSIGNMENTS ARE NOT JUST ABOUT LEARNING TO DO THE PROBLEM. IT IS ABOUT LEARNING TO PRESENT YOUR WORK SO OTHERS CAN UNDERSTAND WHAT YOU DO - A VALUABLE SKILL IN THE WORKPLACE.

Things to remember

- 1) Re-Draw the Circuit on your homework sheet.
- 2) Show all work.
- 3) Final answer should be in decimal form.
- 4) Final answers should be boxed.
- 5) Your name should be on every page.