1. Problem 4.13 in chapter 4, p. 224 of Muller, Kamins & Chan (3rd edition). Hint: use (4.4.20) and compare \( \Theta \) (tunneling probability) with that in (4.4.18). Then calculate the average electric field.

2. Problem 5.20 in chapter 5, p. 277 of Muller, Kamins & Chan (3rd edition). Hint: Make sketches and label relevant potentials including \( \phi_{bi} \).

3. Problem 5.21 in chapter 5, p. 277 of Muller, Kamins & Chan (3rd edition). In part (a), just do for 0.1 and 0.7 volts; for part (b), just do for 0 and 20 volts.


Homework assignments will appear on the web at: http://www.ece.udel.edu/~kolodzey/courses/eleg646s10.html

Note: On each homework and report submission, please give your name, the due date, assignment number and the course number.