

ELEC 2501 Midterm #1 Marking Scheme

Q1: 0.25 marks for getting the 2 parallel resistors correct (first part of solution) 0.25 marks for recognizing there are 4 resistors in parallel. 0.5 marks for correct answer

Q2. 0.25 marks for knowing current is the power/voltage 0.25 marks for knowing charge is current x time 0.5 marks for correct charge -0.25 marks for integrating over the wrong interval.

Q3. 0.5 marks for correct answer with wrong sign

Q4. 0.5 marks for correctly finding I_x 0.5 marks for finding V_x with wrong I_x carried through - 0.25 marks deducted for correct value with sign error (so 0.75/1)

Q5. 0.25 marks for finding current 0.25 marks for having the current in the correct direction 0.5 marks for correct V_{ba} -0.25 marks deducted for correct value with sign error of V_{ba} (so 0.75/1)

Q6. -0.25 marks deducted for correct value with sign error (so 0.75/1)

Q7. 0.25 marks for every correct element -0.25 marks deducted for every incorrect element (with a min of zero awarded) This ensures the students don't just simply list all the elements

Q8. 0.25 marks for recognizing a Wye-Delta 0.25 more partial at discretion since algebraic errors could be very likely, with a max of 0.5 marks awarded with a max of 0.5/1.