

Printed Name: _____.

PHYSICS 331

MISSION 8: RETARDED E&M TO RADIATION (38+2)PTS)

Problems mentioned refer to David Griffith's *Introduction to Electrodynamics*, 5th edition. Skip two problems. Each problem worth 5pts.

Problem 78 Problem 10.13 (Coulomb's Law holding in a particular context)

Problem 79 Problem 10.14 (Biot-Savart Law approximately holding)

Problem 80 Problem 10.17 (deriving Lienard Weichart potential for constant velocity charge)

Problem 81 Problem 10.20 (algebra to support conclusions of §10.3)

Problem 82 Problem 10.21 (electric and magnetic fields of moving charge)

Problem 83 Problem 10.22 (moving flux calculation!)

Problem 84 Problem 10.26 (summary diagram)

Problem 85 Problem 11.1 (retarded dipole problem)

Problem 86 Problem 11.14 (lifetime of classical electron)

Problem 87 Problem 11.18(a) (point charge on a spring)