Coulomb's Law and Electric Potential Quick Sheet

Print Last Name giftakis Print First Name benjamin

Section _____ Date _____ TA _____

Lab Partner_____

Instructions: Enter in the spaces provided the requested results from the experiment you have just completed. Your TA needs to approve this before you leave the lab. Five points will be lost if this is not done. **You should copy this information for yourself before you leave the lab.** Your TA keeps this quick sheet as a record of your attendance.

Part 1: Calculation of the Coulomb constant

$k_e \pm S_{ke}$ = 8.99E+9 +- 124713 Nm^2/C^2

% diff = 0.02%

Part 2: Calculation of a point charge using the electric field

$+q \pm S_{+q}$ = 9.733E-10 +- 0 C

% diff = 2.67%

$- q \pm S_{-q}$ = -9.733E-10 +- 0 C

% diff = 2.67%

Part 3: Verifying the electric field formula using the inverse square law

$k_e q(1,2)$ = 9.0057 $k_e q(3)$ = 8.75

PFE = 2.92%