Asynchronous Activity 1, Worksheet

Gabi Torres Joubert

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1 How to Submit this Worksheet

- 1. Download this PDF to your device.
- 2. Complete the procedure below.
- 3. Scan your document into a PDF using a Smartphone app, or simply a photo. One example app is SimpleScanner. Websites also exist to convert jpg to PDF format (e.g. https://smallpdf.com/jpg-to-pdf).
- 4. Upload your worksheet PDF to Moodle via the submission link.

2 The Procedure

Repeat the procedure performed in the tutorial videos on Moodle: Asynchronous Lesson 1, parts 1 and 2. However, choose your own distances in the E vs. r calculation, and your own charge values in the E vs. q calculation. Graph your

results below. the correct units. and label the graphs with the axes of Distance (m) 1/Distance^2 E-Field The Coulomb Field 0.3 11.1111111 96.2 24.9 0.6 2.7777778 0.9 1.2345679 10.9 y = 8.6528x + 0.21E-field Magnitude (N/C) 1.2 0.69444444 6.21 $R^2 = 0.9999$ 1.5 0.4444444 1.8 0.30864198 2.76 2.1 0.22675737 2.02 2.4 0.17361111 1.54 Charge (nC) E-field (N/C) 3 6.69 0 10 12 6 13.4 1/distance^2 (m^2) 9 20.1 12 26.8 The Coulomb Field 15 33.5 18 40.3 y = 2.2471x - 0.1121 21 47.1 24 53.9 10 0 0 5 10 15 20 25 30 Charge (nC)

