

Asynchronous Activity 1, Worksheet

Prof. Jordan C. Hanson

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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.

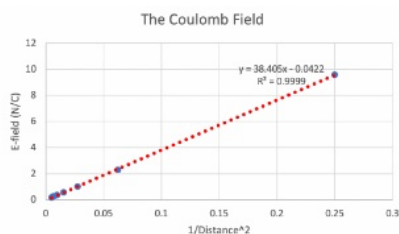
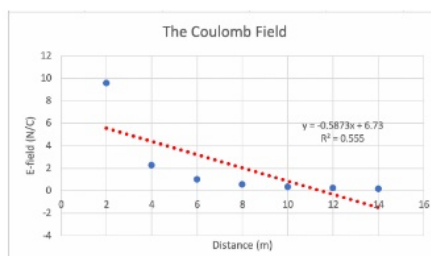
2 The Procedure

Repeat the procedure performed in the tutorial videos on Moodle: *Asynchronous Lesson 1, parts 1 and 2*. However, choose your own distances in the \vec{E} vs. r calculation, and your own charge values in the \vec{E} vs. q calculation. Graph your results below, and label the axes of the graphs with the correct units.

1) E vs r

Distance (m)	E-field (N/C)
2	9.58
4	2.27
6	1.01
8	0.57
10	0.36
12	0.25
14	0.18

1/Distance ² (E-field (N/C)	
0.25	9.58
0.0625	2.27
0.027777778	1.01
0.015625	0.57
0.01	0.36
0.006944444	0.25
0.005102041	0.18



2) E vs q

Charge (nC)	E-field (N/C)
2	4.44
4	8.86
6	13.2
8	17.6
10	22.1
12	26.4
14	30.8

