

Asynchronous Activity 1, Worksheet

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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

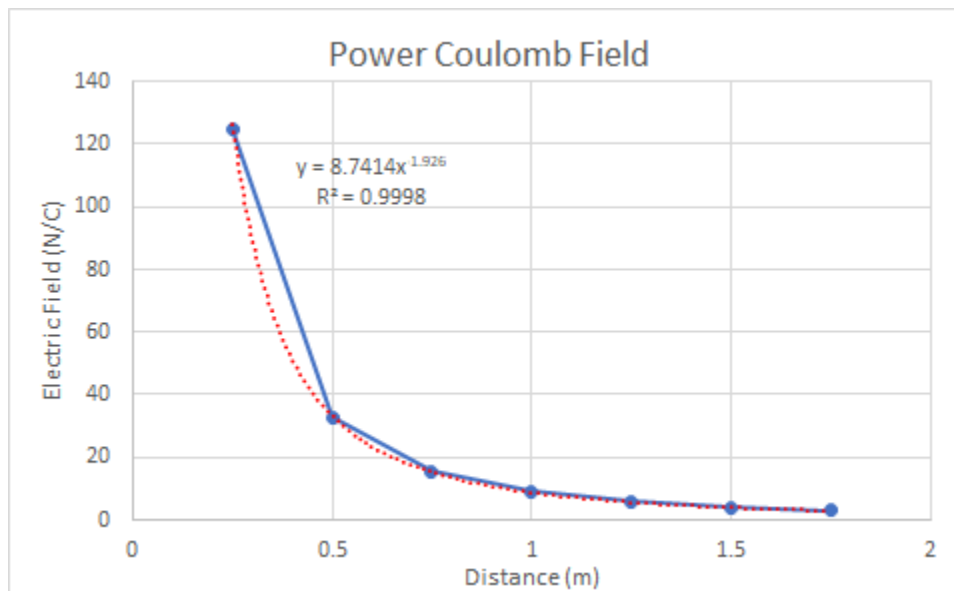
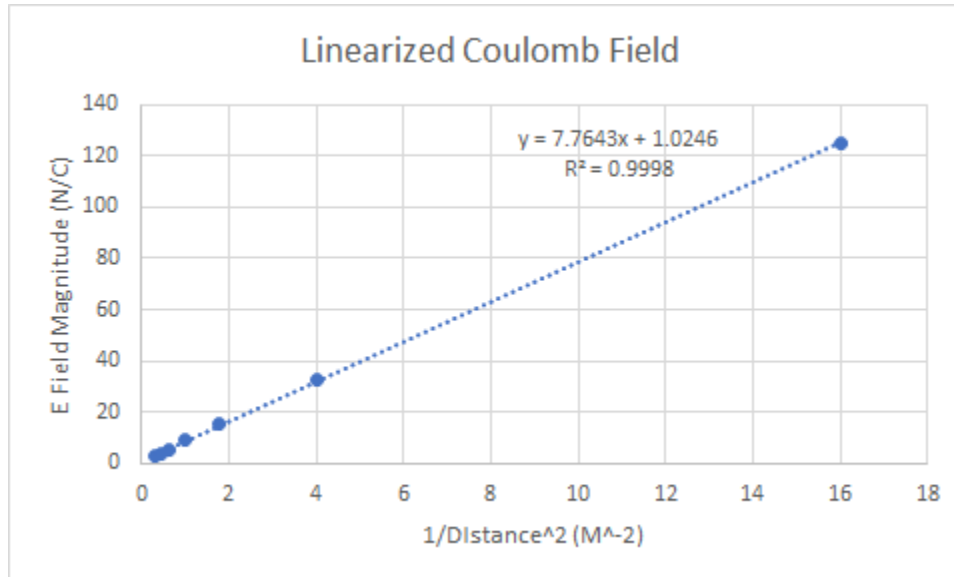
Repeat the procedure performed in the tutorial videos on Moodle: Asynchronous Lesson 1, parts 1 and 2. However, choose your own distances in the \vec{E} vs. r calculation, and your own charge values in the \vec{E} vs. q calculation. Graph your results below, and label the axes of the graphs with the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

Alex Coco

E vs r

Distance (m)	E field (N/C)	1/distance ² (m ⁻²)	E-field (N/C)
0.25	125	16	125
0.5	32.9	4	32.9
0.75	15.5	1.777778	15.5
1	8.96	1	8.96
1.25	5.77	0.64	5.77

1.5	3.94	0.444444	3.94
1.75	2.91	0.326531	2.91



E vs q

<u>Charge</u> <u>(nC)</u>	<u>E-field</u> <u>(N/C)</u>
<u>1</u>	<u>2.91</u>
<u>3</u>	<u>8.74</u>
<u>5</u>	<u>14.6</u>
<u>7</u>	<u>20.4</u>
<u>9</u>	<u>26.2</u>
<u>11</u>	<u>32.1</u>
<u>13</u>	<u>37.9</u>

