## 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 E vs. r calculation, and your own charge values in the E vs. q calculation. Graph your results below, and label the axes of the graphs with the correct units.

	1/Distance^2 (m		The Carri	omb Field F	. VO . F		
0.25		134	The Coulomb Field E vs. r				
0.5	4	38.8		E-fi	eld (N/C)	8.36*x + 1.19	
0.75	1.77777778	16.7	150				
1	1	9.12					
1.25	0.64	5.91					
1.5	0.444444444	4.07	<u> 100</u>				
1.75	0.3265306122	3.01	E-field (N/C)				
2	0.25	2.27	plei				
			<b></b> 50				
			0		5	10	15
					1/Distand	ce^2 (m^2)	
						ce^2 (m^2)	
			The Coul	omb Field E		ce^2 (m^2)	
Charge (nC)	E-field (N/C)	*0.5m	The Coul				
3	107	*0.5m			vs. q		
3 6	107 210	*0.5m	The Coul		vs. q		
3 6 9	107 210 315	*0.5m	1000 —		vs. q		
3 6 9 12	107 210 315 419	*0.5m	1000 — 750 —		vs. q		
3 6 9 12 15	107 210 315 419 524	*0.5m	1000 — 750 —		vs. q		
3 6 9 12 15	107 210 315 419 524 630	*0.5m	1000 — 750 —		vs. q		
6 9 12 15 18 21	107 210 315 419 524 630 735	*0.5m	1000 — 750 — 500 — 500 —		vs. q		
3 6 9 12 15	107 210 315 419 524 630 735	*0.5m	1000 — 750 —		vs. q		
3 6 9 12 15 18 21	107 210 315 419 524 630 735	*0.5m	1000 — 750 — 500 — 500 —		vs. q		
3 6 9 12 15 18 21	107 210 315 419 524 630 735	*0.5m	1000 — 750 — 500 — 500 —	● E-fi	vs. q	34.9*x + 1.25	20
3 6 9 12 15 18 21	107 210 315 419 524 630 735	*0.5m	1000 — 750 — 500 — 250 —		VS. q eld (N/C)		20