Lab 7: The DIY Capacitor

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Part 1

Table 1: Geometry of the Capacitor							
Width 1 w_1							
Width 2 w_2							
Area of overlap A							

Table 2: Impedance the DIY Capacitor										
n	R	V_{RC}	V_R	V/DIV for V_R	f_{gen}	f_osc	I_R	V_C	$V_{C,exp}$	
1	680Ω	0	0	0	0	0	0	0	0	
2	680Ω	0	0	0	0	0	0	0	0	
3	680Ω	0	0	0	0	0	0	0	0	
4	680Ω	0	0	0	0	0	0	0	0	
1	680Ω	0	0	0	0	0	0	0	0	
2	680Ω	0	0	0	0	0	0	0	0	
3	680Ω	0	0	0	0	0	0	0	0	
4	680Ω	0	0	0	0	0	0	0	0	
1	680Ω	0	0	0	0	0	0	0	0	
2	680Ω	0	0	0	0	0	0	0	0	
3	680Ω	0	0	0	0	0	0	0	0	
4	680Ω	0	0	0	0	0	0	0	0	

 V_R

 V_{RC}

Graph 1

Graph 2

1. What slope do you find for graph 2 and how does it compare to your expectation?

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2. What do you think could cause the offset in the fit?

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