Lab 9: RC Discharge

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Table 1: Discharge										
\mathbf{R}	C	f(Hz)	$V_{min}(V)$	$\mathbf{t_{srn}(DIV)}$	SEC/DIV	$\mathbf{t_{srn}(s)}$	$V_{srn}(DIV)$	V/DIV	$ m V_{srn}$	$V_{dischg}(V)$
100Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
100Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
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150Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
150Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
270Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
270Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
270Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
270Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
270Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
47Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
47Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
47Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
47Ω	$0.22\mu\mathbf{F}$			50us				0.2V		
47Ω	$0.22\mu\mathbf{F}$			50us				0.2V		

$V_{\rm discharge} \,\, Setup$

setup

Graph 1

graph 1

Graph 2

graph 2

• What is the value of the slope in the second graph and how does that compare to what you expected?