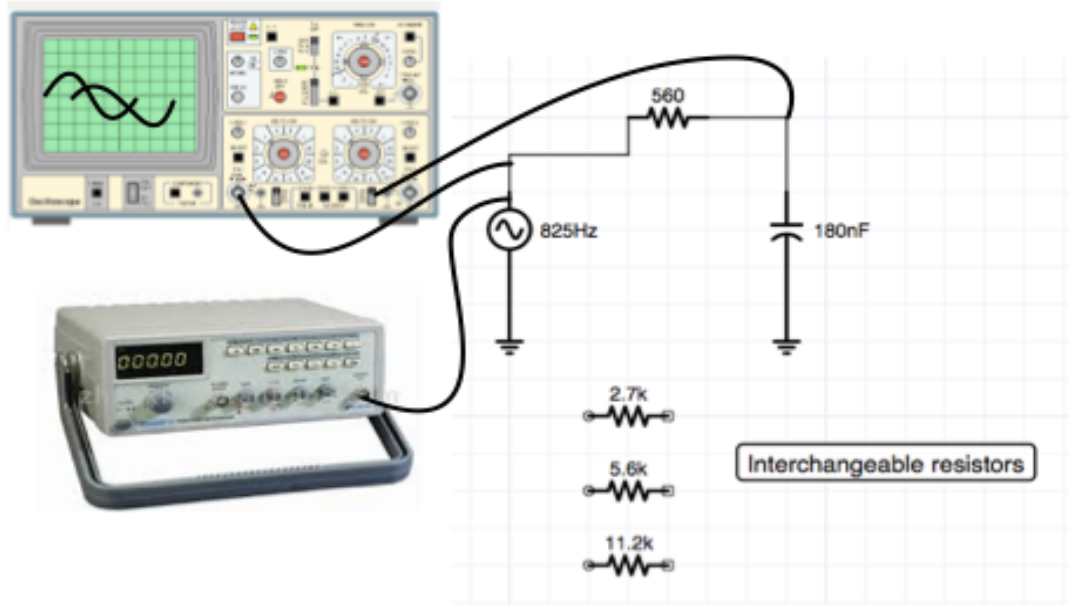


## Phase relationship Lab AC

Construct the following circuit with Signal Generator and Function Generator. You will be taking measurements of phase difference based on the value of R in an RC series circuit.

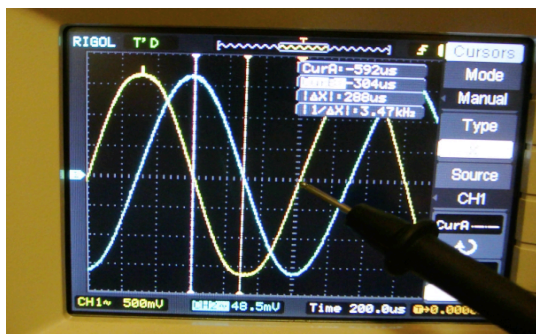


Note, there are 4 resistor values to work with. The 11.2k is two 5.6k in series.

Adjust the oscilloscope to give the same height with both of your inputs. That is,  $V_{applied}$  and  $V_c$ .

Use the time difference as measured with the cursors on the oscilloscope.

$$PD = \left( \frac{t}{T} \right) \times 360$$



Here is an example of the screen view you will have for the measurements.

	$V_c$	time shift $\mu S$	Phase shift degree
560 $\Omega$			
2700 $\Omega$			
5600 $\Omega$			
11200 $\Omega$			