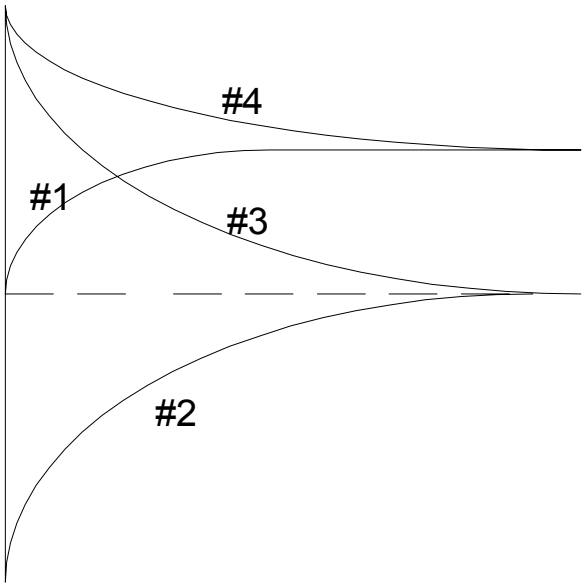
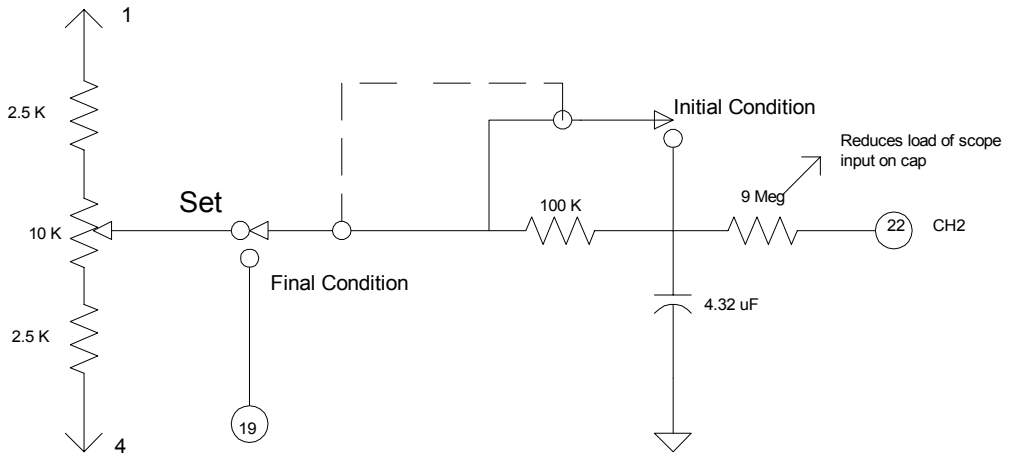
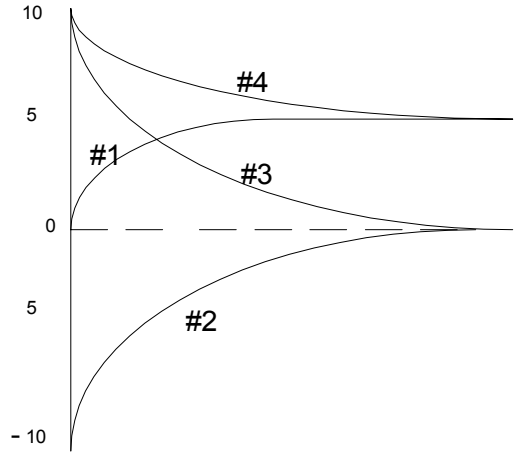
6.002 Demo# 26
RC Response
Lecture 12 **Agarwal Fall 00**

Purpose:
Displays the response of an RC circuit for various initial and final conditions.

Steps:







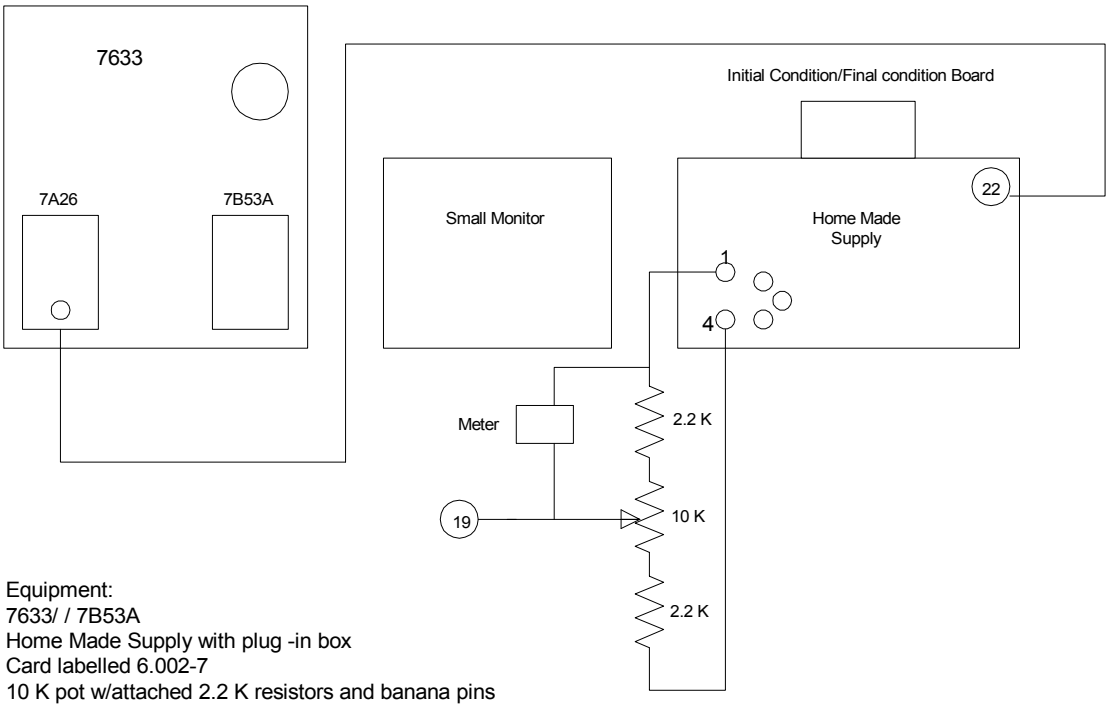
Procedure:

1) Preset lower pot to 5 v, using scope don't show this (Calibration)

2) Set upper pot to 0 volts with meter, sweep a trace. [#1]

3) Short wiper of lower pot to ground @ (19). Set upper pot to -10 v with meter , sweep a trace. [#2]
Set upper pot to +10 v with meter, sweep a trace. [#3]

4) Unclip wiper of the lower pot, sweep the trace [#4] total



Equipment:
7633/ / 7B53A
Home Made Supply with plug -in box
Card labelled 6.002-7
10 K pot w/attached 2.2 K resistors and banana pins

Scope Settings
Vert Mode = Left
Store
Var persist = In
Persistance Knob = Max
Storage Level ~ 12:00
Trig Source = Vert mode
CH2 = .5v/Div (Actual sens = 5v/Div due tp 10:1 ratio resistor on circuit board amd 1 Meg input resistor of scope.

Main Triggering settings:
Mode = Single Sweep, Coupling =AC, Source=Line,
Sweep=.5 Sec/Div
(Press Reset Button when a sweep is desired)
Make sure Mag in switch is on [IN]