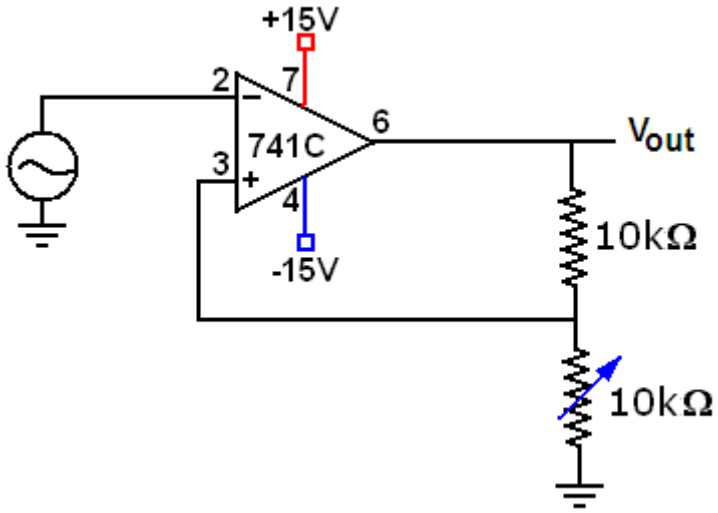
Electronics Lab

Schmidt trigger

Experiment:

- Connect the circuit shown in the figure with a 10k ohm-potentiometer in the feedback loop. Notice that the signal is entering the inverting input as opposed to the non-inverting input that we normally use for amplification.



- Observe the response of the circuit in the oscilloscope. Channel 1 connected to the input (pin 2 in the 741) and channel 2 connected to the output (pin 6 in the 741) then choose the X-Y display in the oscilloscope.
- Measure the saturated voltage and compare that to the 15 volts from the source. Can you explain the difference, if any?
- Change the pot resistor and observe the effect on the output.
- Change the pot resistor until the switching points are 1 and -1 volts. Then measure the pot resistance and compare to your calculate d values.