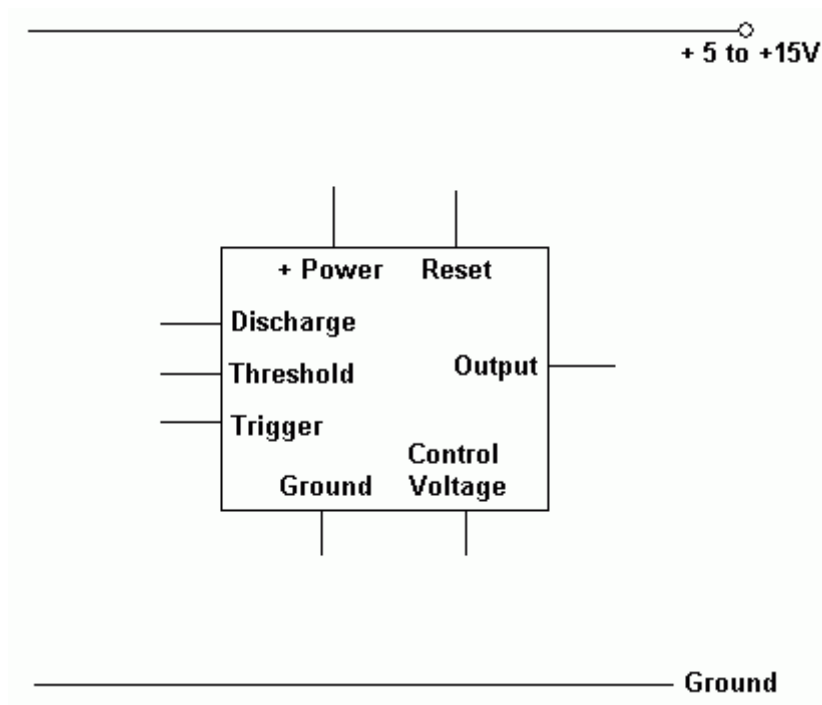


13 555 Timer Test

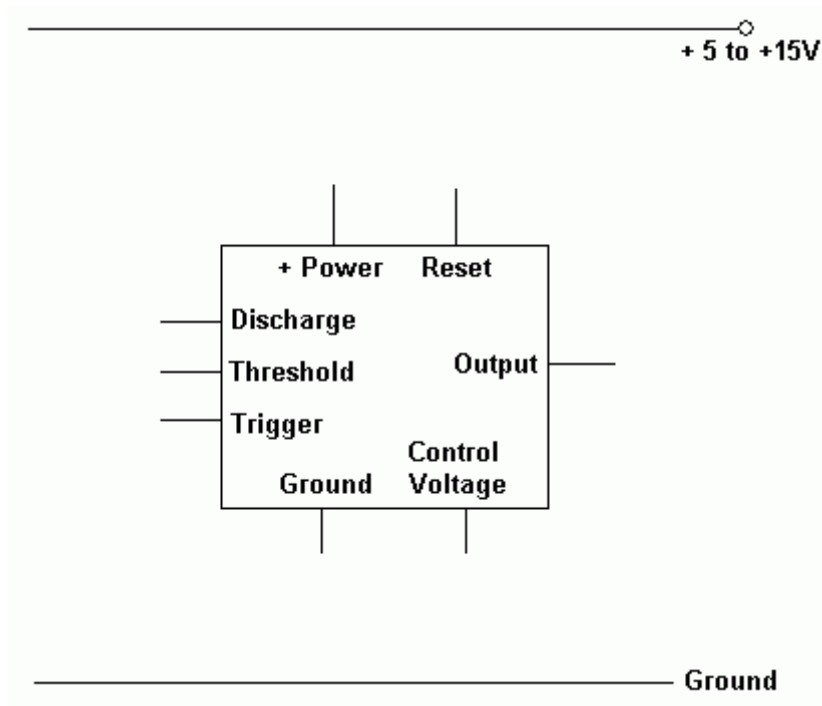
Your Name:

1. Draw the circuit diagram for a Monostable circuit.



2. Add an LED to the diagram above. The LED should be on during the timing period.
3. Add a buzzer to the diagram above. The buzzer should sound when the timing period is completed.
4. Write down the formula for the Monostable period.
5. If a 10 microfarad timing capacitor is used, calculate the resistor needed to time 5.17 seconds.
6. If a 2 megohm resistor is used, calculate the capacitor needed to time 4.84 seconds.

7. Draw the circuit diagram for an Astable circuit.



8. Calculate the period of the astable if R_a is 10 kilohms, R_b is 100 kilohms and C is 100 nanofarads.