

Name:

Section:

1. (Parallel Plate Capacitor) A capacitor plate hold charge Q . Why is the voltage of this plate small when a grounded plate is near, but large(for the same Q) when it is alone(or further separate from the other)?
2. (Parallel Plate Capacitor) How could you double the positive charge on one capacitor plate without changing the negative charge on the other plate?
3. (Capacitors in parallel, series and RC circuit) Show that when two capacitors C_1 and C_2 are connected in parallel, $C_{total} = C_1 + C_2$.
4. (Capacitors in parallel, series and RC circuit) What is the unit of RC ? What is the physical meaning of it?