

Preflight 4.4

A circuit consists of three initially uncharged capacitors C_1 , C_2 , and C_3 , which are then connected to a battery of emf ε . The capacitors obtain charges q_1 , q_2 , q_3 , and have voltages across their plates V_1 , V_2 , and V_3 . Which of these are true?

- 1) $q_1 = q_2$
- 2) $q_2 = q_3$
- 3) $V_2 = V_3$
- 4) $\varepsilon = V_1$
- 5) $V_1 < V_2$
- 6) $C_{eq} > C_1$

