HOMEWORK 1

ECE 580, 2023

In a switched capacitor circuit, initially $C_1 = 1$ pF is charged to $V_1 = 2$ V, and $C_2 = 1$ pF to $V_2 = 3$ V. At t = 0, the two capacitors are connected in parallel.

(a) What will be the final voltage across them?

(b) What will be the stored energy before joining the capacitors?

(c) What will it be after the transient?

(d) Where did the lost power go?