

Electricity: Circuits with Capacitors

⚠ This is a preview of the draft version of the quiz

Started: Nov 4 at 10:56am

Quiz Instructions

Question 1

1 pts

Four capacitors all with a capacitance of 2 mF are connected in parallel. What is the capacitance in mF of the system of capacitors?

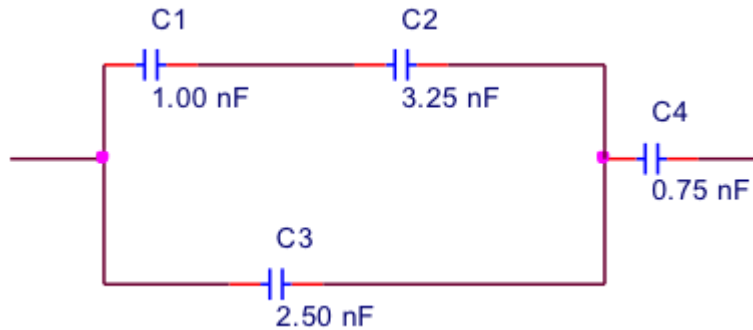
- 8
- .5
- 1
- 4

Question 2

1 pts

Consider two capacitors both with a capacitance of 3 F. Which of the following combinations will provide the greatest amount of charge on each capacitor?

- The capacitors connected in parallel to a 9 V battery.
- The capacitors connected in series to a 9 V battery.
- The capacitors connected in series to a 12 V battery.
- The capacitors connected in parallel to a 12 V battery.

Question 3**1 pts**

What is the capacitance in nF of the system in the diagram above?

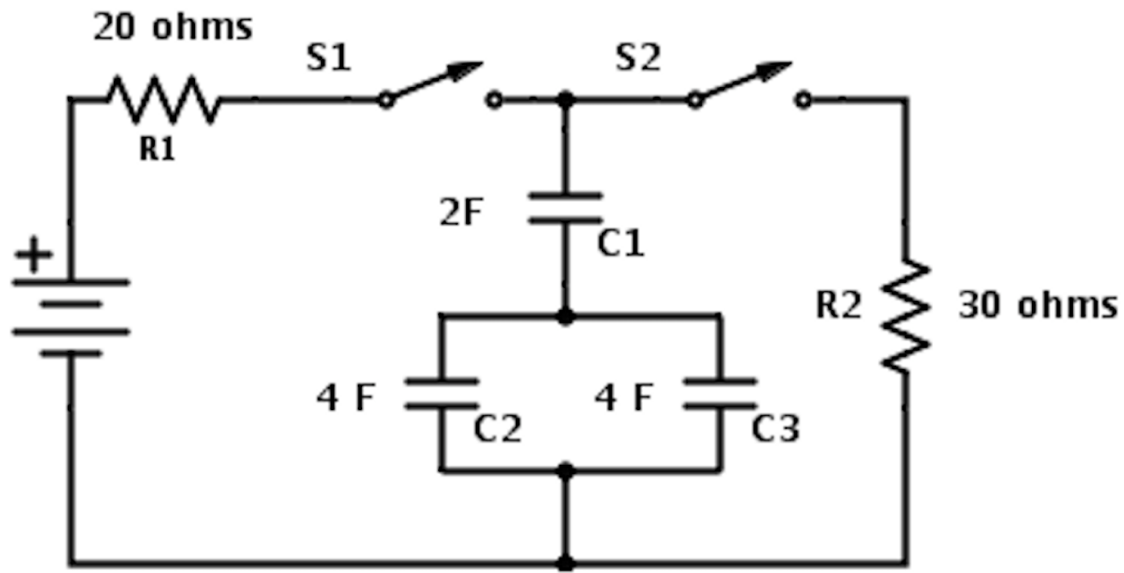
- 2.12
- .61
- .55
- 2.32

Question 4**1 pts**

A 150.0pF capacitor is initially charged with 750.0pC. The ends of a 10.0Ω resistor are then connected to the ends of the capacitor. What is the initial power in Watts dissipated by the resistor?

- 250
- 40
- 7.5
- 2.5

Question 5**1 pts**



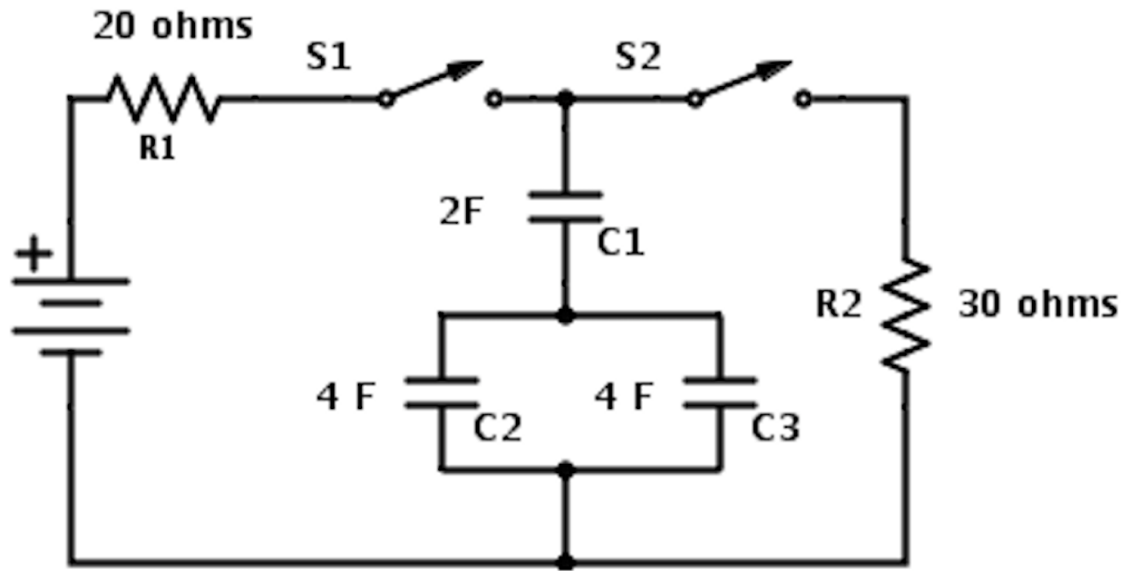
What amount of charge in C transferred to the capacitors when switch 1 is closed?

- 88
- 22
- 44
- 176

Question 6

1 pts

What is the charge in C on C1 after the switch has been closed for a length of time?

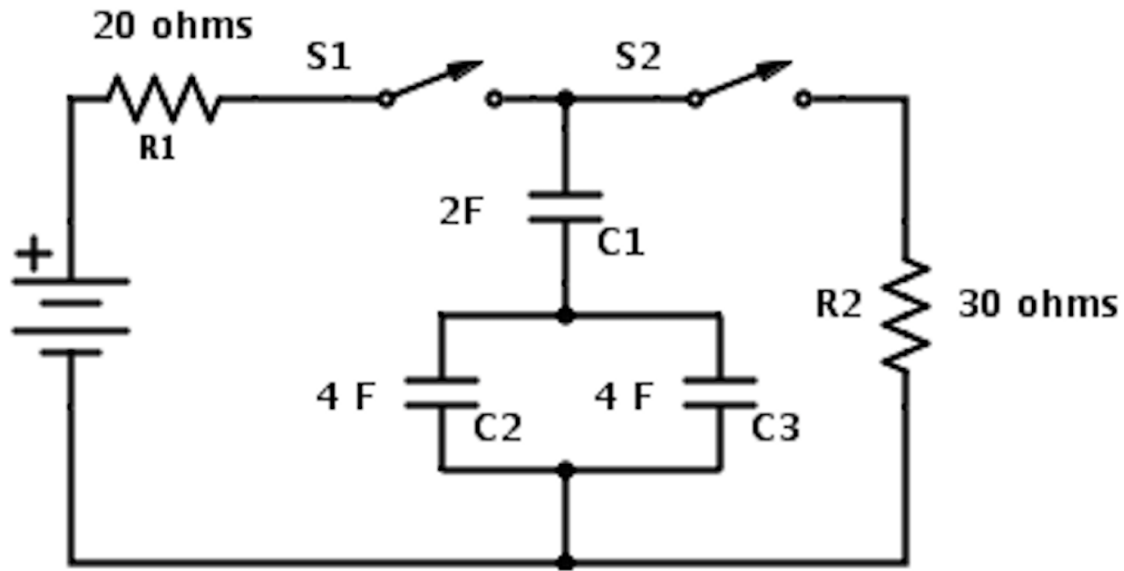


- 44
- 22
- 88
- 176

Question 7

1 pts

What is the C charge on C_3 ?

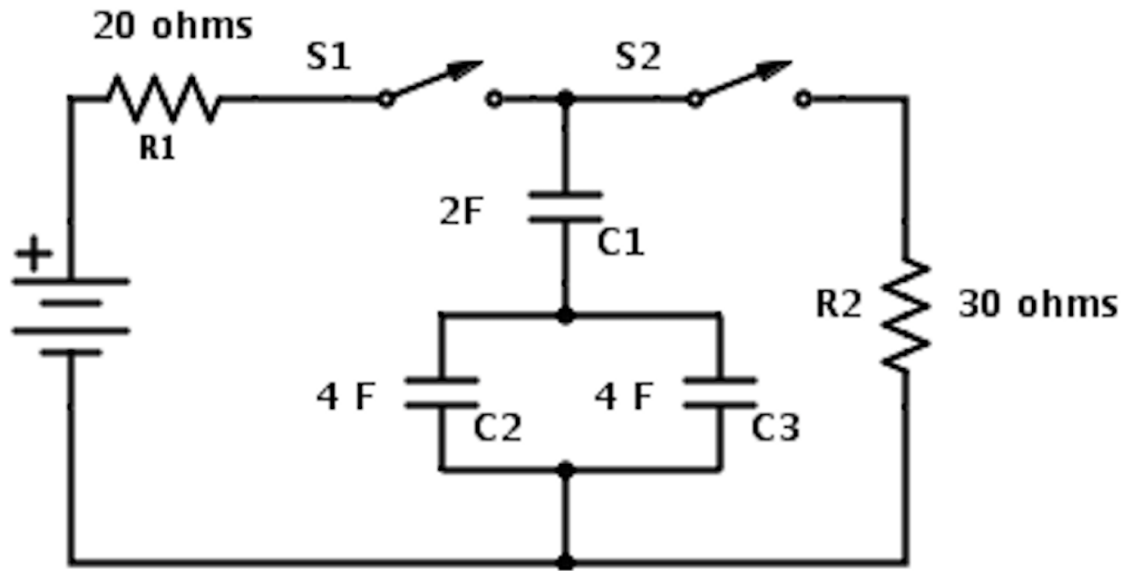


- 22
- 88
- 176
- 44

Question 8

1 pts

What is the voltage across C_2 ?



- 88
- 22
- 176
- 44

Question 9

1 pts

What is the amps of current in the circuit when switch 1 is closed and switch 2 is open?

- 12
- 7.8

5.5 1.5**Question 10****1 pts**

After a long time, switch 1 is opened and switch 2 is closed. What is the amps of current in the circuit immediately after switch 2 has closed?

 3.7 5.5 11 6.2

Not saved

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