**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PHY2049C, Quiz 4**

**A- Read all the quiz once, or twice, before beginning to write. Make sure to comprehend all questions and start with those you fell most confident.**

**B – Be clear and concise. There are no extra points for being verbose or writing extra.**

**C –Only use the white pages that I will provide. You have 50 minutes to answer the quiz.**

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**Problem 1**

What’s the power through the resistance 2in the circuit (the battery on the right is 15 V)

**Problem 2**

When steady-state is reached, what is the charge of the capacitors in the figure?

A paper with text and diagrams

Description automatically generated

**Problem 3**

The Figure displays two circuits with a charged capacitor that is to be discharged through a resistor when a switch is closed. R1 =20.0 Ohms and C1 = 5.00 pF. In Fig. R2 = 10.0 Ohms and C2 =

8.00 pF. The ratio of the initial charges on the two capacitors is . At time t = 0 both switches are closed. At what time t do the two capacitors have the same charge?

A diagram of a circuit

AI-generated content may be incorrect.