

Homework Assignment #8 - Capacitors

Reading Assignment:

Chapter 6 in Electric Circuits, 8th Edition by Nilsson

Problem Assignment:

Note: Be sure to follow the required PROBLEM FORMAT for every assignment in this course.

Ch. 6 problems: 15, 17, 18, 19, 25, 26, 27

Selected Answers:

6.17) a) 1.25 μC b) 5 V c) 2 μJ

6.18) a) 250 μJ b) 19307 μJ

6.19) a) 125 μJ b) $A_2 = 25$, $A_1 = 262,500 \text{ V/s}$ c) $i = (90 - 157,500t)e^{-1500t} \text{ mA}$

6.25) 16 μF (with 5V across the capacitor, + terminal at the bottom)