

Circuits and Signals: Biomedical
Applications
Week 6
In-Class Exercises

Charles A. DiMarzio
EECE-2150
Northeastern University

Oct 2023

Express in Rectangular and Polar Form and Graphically

- $(j^6)^*$
- $(2\angle 4^\circ)^{12}$
- $7\angle 35^\circ \times 6\angle -13^\circ$
- $\sqrt{16\angle \pi/4}$
- $(12 + 16j) + \text{Complex Conjugate}$

Same Problems: Do it in Matlab

- $(j^6)^*$
- $(2\angle 4^\circ)^{12}$
- $7\angle 35^\circ \times 6\angle -13^\circ$
- $\sqrt{16\angle \pi/4}$
- $(12 + 16j) + \text{Complex Conjugate}$

Plot vs. Time

$$i = 7 \text{ mA}e^{j\pi/4} + 4j\text{mA at } 60\text{Hz}$$