

EE303 — Energy Systems and Power Electronics

Lecture 5. Three-phase circuit analysis

Prof. Dionysios Aliprantis

Electrical & Computer Engineering

Sep. 8, 2008

Today's objectives

- INFER** equation of complex power (using phasors)
- DEFINE** leading/lagging power factor
- DESCRIBE** basics of three-phase circuits
- DEFINE** line-to-line voltage
- DISTINGUISH** line-to-line voltage from phase voltage



Please read Chapter 9 (Electric Safety) of textbook!

Quiz

Problem

$\tilde{V} = -5j$ V. Plot $v(t)$.

Reading material

The material we covered today corresponds to:

- Module B3, pp. 7–21 of class notes
- Chapter 7, pp. 147–178 of textbook
- Chapter 8, pp. 179–200 of textbook