

EENG307: Intro to Feedback Control

Fall 2020

Homework Assignment #1

Quiz #1

Quiz Question Friday: Evaluate each of the following to a complex number in polar form

(a) $(1 + j)(-1 + 2j)$

(b) $\frac{-1-j}{1-2j}$

Which is the correct reduced form for the complex ratio given in part (b)?

(a) $\sqrt{\frac{2}{5}}e^{-j1.25}$

(b) $\sqrt{\frac{5}{2}}e^{1.25}$

(c) $\frac{2}{5}e^{1.25}$

(d) $\frac{1}{2}$

(e) $\sqrt{\frac{5}{2}}e^{-j0.75}$