

ECE 341 Quiz 3

A transmission line of characteristic impedance  $Z_0 = 50 \Omega$  is terminated in a load  $Z_L = 75 \Omega$ . Is the load at a voltage maximum or a voltage minimum? (Not asking yes or no, but which.) Why?

**Answers**

Maximum.  $Z_L > Z_0$ , constructive interference therefore maximum.

**Grading guideline**

60: Attendance points. Student gets 60 if no right answer is given.

70: Answers maximum but gives wrong reason. (If correct reasons are given among wrong ones, count only the right ones; see below)

90: Answers maximum with largely right reasons but with inaccuracy in the language or math or terminology.

100. Answers maximum with right reasons (even with minor inaccuracy or typos).