

Assignment - 1

Akhil Gattu

Abstract—This document contains the solution to Exercise 3.10 (e) of Oppenheimer.

Problem 1. Given that,

$$x[n] = u[n + 10] - u[n + 5] \quad (1)$$

$$= \begin{cases} 1 & -10 \leq n < -5 \\ 0 & \text{otherwise} \end{cases} \quad (2)$$

find ROC

Solution:

$x[n]$ is finite length and has only positive powers of z , hence, its ROC is $|z| < \infty$