

3C1 Homework No. 5

1. Consider a causal system with impulse response

$$h(t) = e^t u(t).$$

Is $h(t)$ absolutely integrable?

Determine the system function $H(s)$.

Plot the pole of $H(s)$ in the s -plane and indicate the ROC of $H(s)$.

Problems 9.29

9.31

in Chapter 9 of the text "Signals and Systems"
by A. V. Oppenheim and A. S. Willsky
2nd edition, Prentice Hall, 1997.