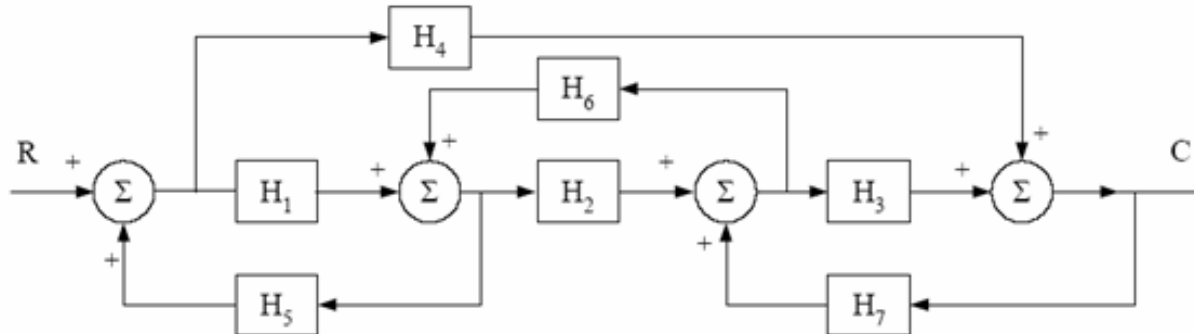


AMERICAN UNIVERSITY OF BEIRUT
ELECTRICAL AND COMPUTER ENGINEERING DEPARTMENT
EECE 340
Homework IV – Block Diagram System Representation

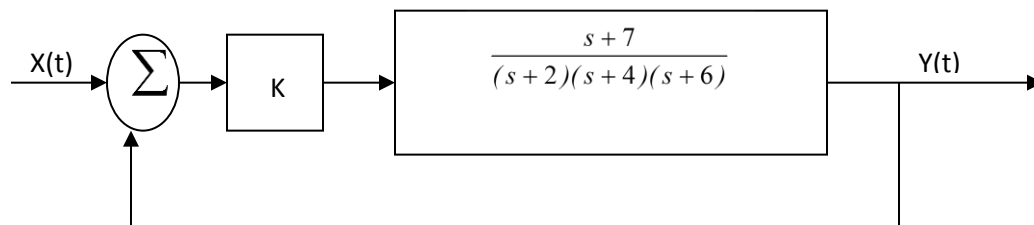
Problem 1

Find the transfer function of the following system.



Problem 2

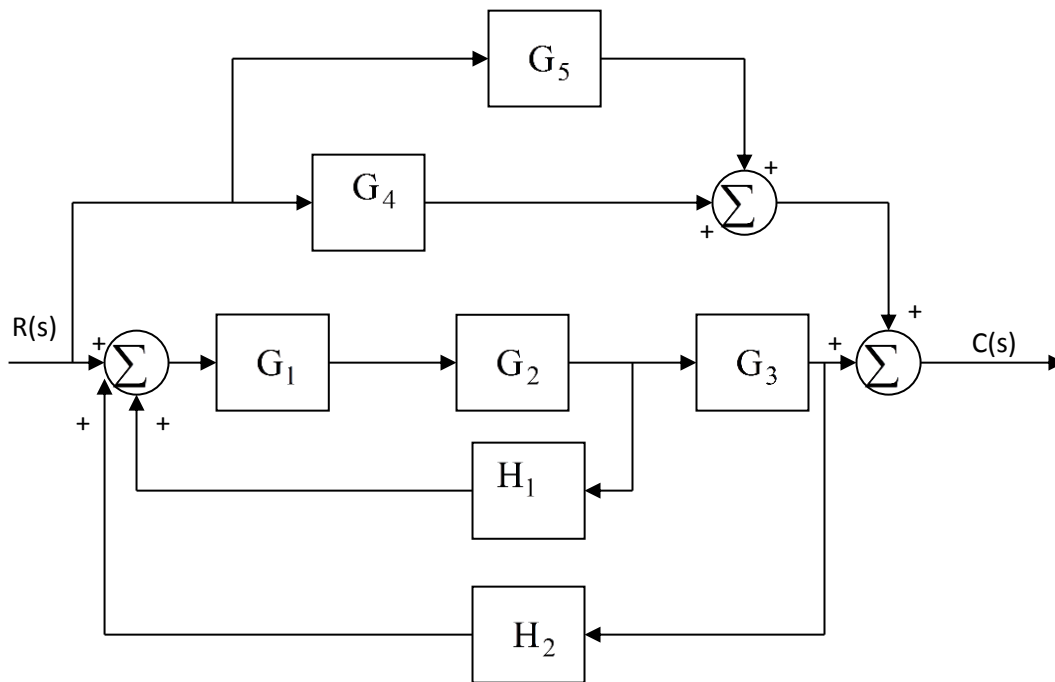
Consider the unit feedback system shown below



Determine the error signal $E(s)$.

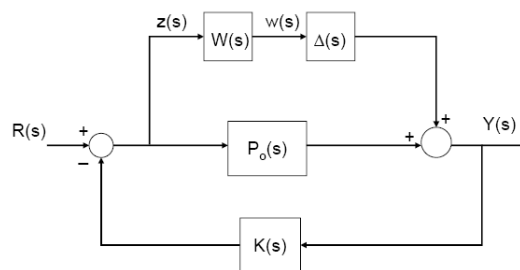
Problem 3

The block diagram representation of an LTI system is shown below. Determine the transfer function of this system.



Problem 4

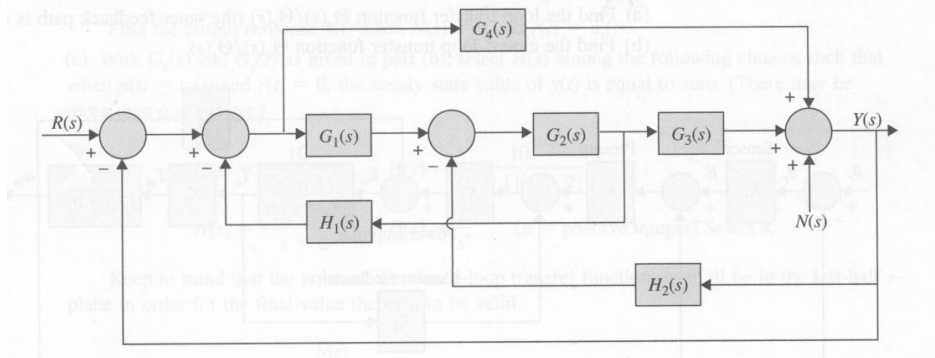
The block diagram of a LTI system is shown below



Determine the transfer function of this system

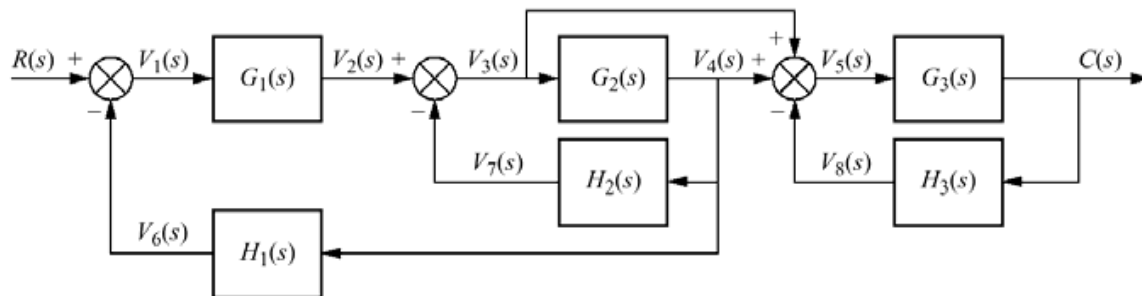
Problem 5

Find the output $Y(s)$ of the LTI system shown below



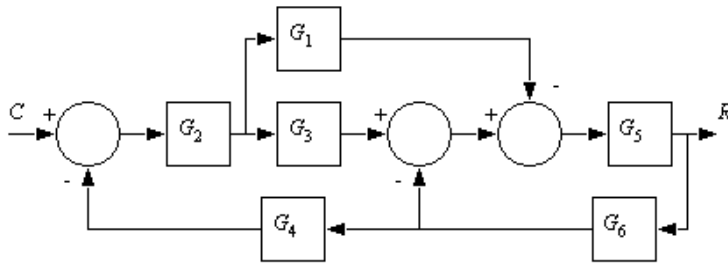
Problem 6

For the system shown below, determine the system transfer function



Problem 7

The block diagram of an LTI system, with input $C(s)$ and output $R(s)$, is shown below



Determine the system transfer function