

Problem :

For the following circuit diagram shown in figure 1

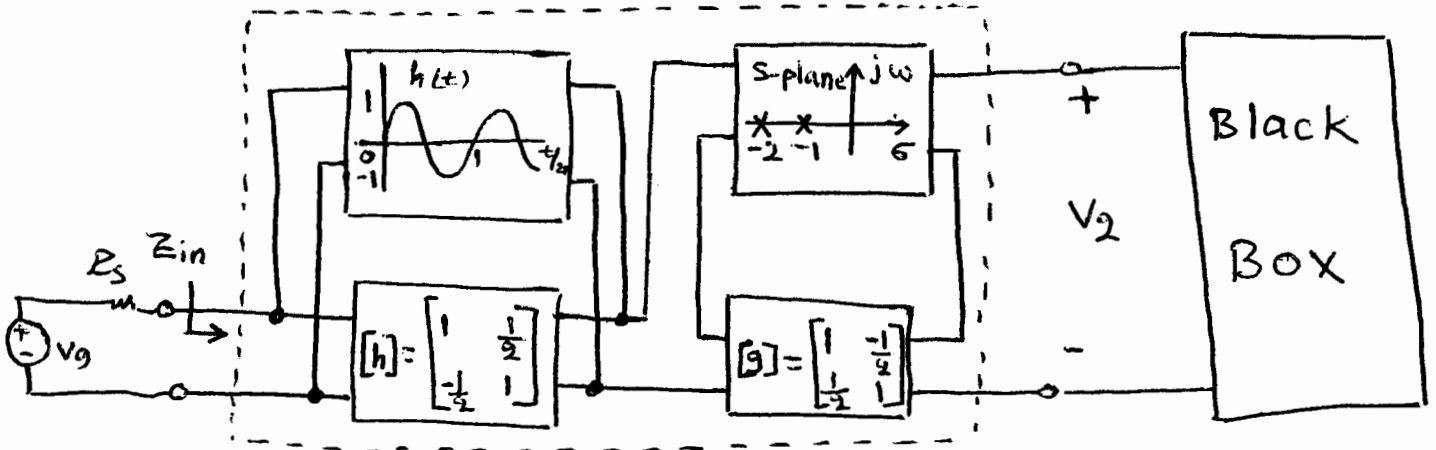


Fig 1

- a. Design the circuits for all networks
- b. If the black box has the following transfer function

$$T_v(s) = \frac{3s}{s^3 + 5s^2 + 6s}$$

1. Design the circuit, using R , C , and inverting amplifier
 2. Design passive network which is equivalent to active network which is obtained in part b.1
- c. Find Z_{in} , and V_2