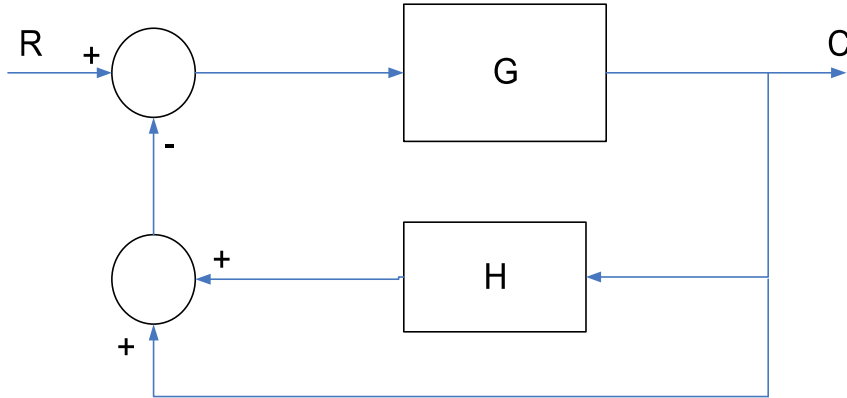


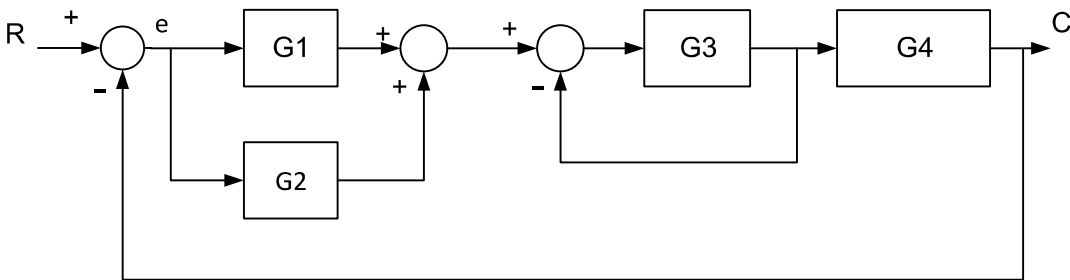
אלגברה של מלבנים

מצא C/R של כל אחד מהתרשימים הבאים:

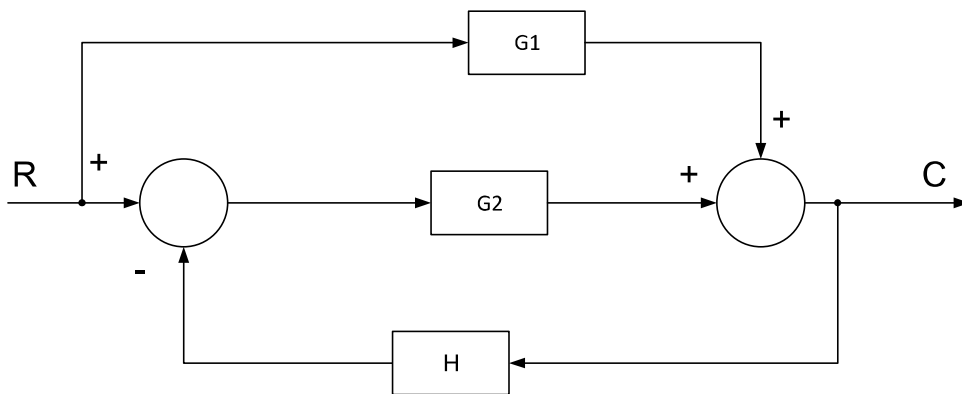
.1



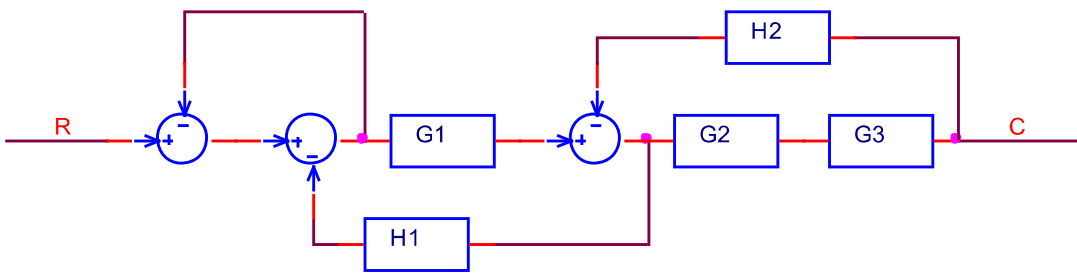
.2



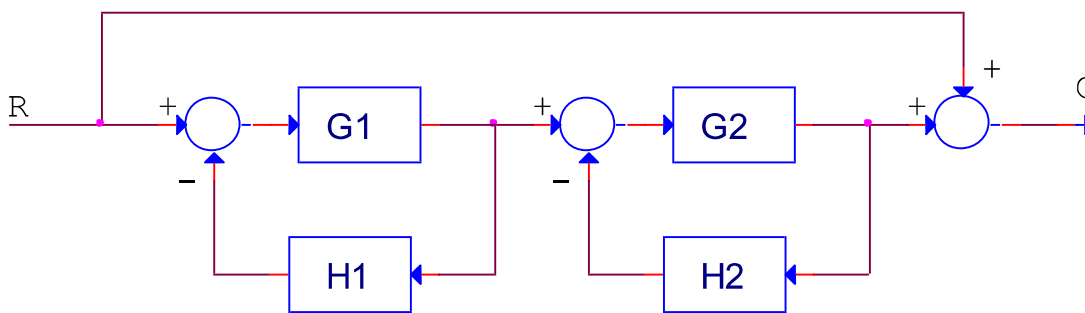
.3



.4



.5



תשובות**לפי מייסון****פתרון 1**

$$T1 = G$$

$$\Delta 1 = 1$$

$$\Delta = 1 + GH + G$$

$$\frac{C}{R} = \frac{T1 \cdot \Delta 1}{\Delta} = \frac{G}{1 + GH + G}$$

פתרון 2

$$T1 = G_1 G_3 G_4$$

$$\Delta 1 = 1$$

$$T2 = G_2 G_3 G_4$$

$$\Delta 2 = 1$$

$$\Delta = 1 + G_3 + G_1 G_3 G_4 + G_2 G_3 G_4$$

$$\frac{C}{R} = \frac{T1 \cdot \Delta 1 + T2 \cdot \Delta 2}{\Delta} = \frac{G_1 G_3 G_4 + G_2 G_3 G_4}{1 + G_3 + G_1 G_3 G_4 + G_2 G_3 G_4}$$

פתרון 3

$$T1 = G_1$$

$$\Delta 1 = 1$$

$$T2 = G_2$$

$$\Delta 2 = 1$$

$$\Delta = 1 + G_2 H$$

$$\frac{C}{R} = \frac{T1 \cdot \Delta 1 + T2 \cdot \Delta 2}{\Delta} = \frac{G_1 + G_2}{1 + G_2 H}$$

פתרון 4

$$T1 = G_1 G_2 G_3$$

$$\Delta 1 = 1$$

$$\Delta = 1 + 1 + G_1 H_1 + G_2 G_3 H_2 + G_2 G_3 H_2 = 2 + G_1 H_1 + 2G_2 G_3 H_2$$

$$\frac{C}{R} = \frac{T1 \cdot \Delta 1}{\Delta} = \frac{G_1 G_2 G_3}{2 + G_1 H_1 + 2G_2 G_3 H_2}$$

פתרון 5

$$T1 = 1$$

$$\Delta 1 = 1 + G_1 H_1 + G_2 H_2 + G_1 G_2 H_1 H_2$$

$$T2 = G_1 G_2$$

$$\Delta 2 = 1$$

$$\Delta = 1 + G_1 H_1 + G_2 H_2 + G_1 G_2 H_1 H_2$$

$$\frac{C}{R} = \frac{T1 \cdot \Delta 1 + T2 \cdot \Delta 2}{\Delta} = \frac{1 + G_1 H_1 + G_2 H_2 + G_1 G_2 H_1 H_2 + G_1 G_2}{1 + G_1 H_1 + G_2 H_2 + G_1 G_2 H_1 H_2}$$