

## **CARRERA:** INGENIERIA ELECTROMECANICA

ASIGNATURA: ELECTROTECNIA NIVEL: 3º

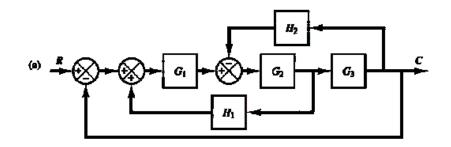
**ACTIVIDAD CURRICULAR:** Simplificar los siguientes ejercicios propuestos.

**ALCANCE:** Unidad 9

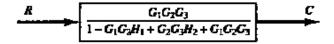
ALGEBRA DE BLOQUES		
	Diagrama de bloques original	Diagrama de bloques equivalente
1	A-B+C B C	A-B+C C B
2	A-B+C B	A-B+C B
3	$\begin{array}{c c} A & & & \\ \hline & G_1 & & \\ \hline & G_2 & & \\ \hline & G_2 & & \\ \end{array} \begin{array}{c} AG_1G_2 \\ \hline \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
4	$\begin{array}{c c} A & & & & & & & & & & & & & & & & & & $	$\begin{array}{c} A \\ \hline \\ G_1G_2 \end{array} \begin{array}{c} AG_1G_2 \end{array}$
5	$\begin{array}{c c} A & & & & & & & & & & & & & & & & & & $	$A \longrightarrow G_1+G_2$
6	A G AG B B B	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
7	A-B G AG-BG	A G AG-BG B G BG
8	A G AG AG	A G AG G AG
9	A G AG A	$\begin{array}{c c} A & & & & & \\ \hline AG & & & & \\ \hline AG & & & & \\ \hline \end{array}$
10	A-B A-B A-B	A-B A-B B
11	$\begin{array}{c c} A & & & & & & & & & & & & & & & & & & $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
12	A	$\begin{array}{c c} A & \hline \\ \hline \\ \hline \\ \hline \\ \end{array} \begin{array}{c} A & \hline \\ \hline \\ \end{array} \begin{array}{c} G_2 & \hline \\ \hline \\ \end{array} \begin{array}{c} G_1 & B \\ \hline \\ \end{array}$
13	G <sub>1</sub> B	$ \begin{array}{c c} A & \hline G_1 \\ \hline 1+G_1G_2 \end{array} $



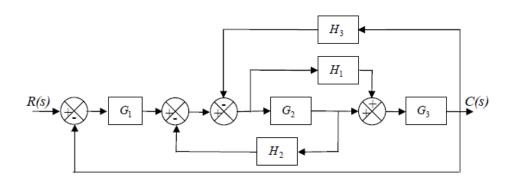
## Ejemplo 1



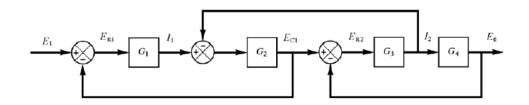
Respuesta



## Ejemplo 2



## Ejemplo 3



Respuesta

$$\frac{E_{1}}{I + G_{3}G_{4} + G_{2}G_{3} + G_{1}G_{2} + G_{1}G_{2}G_{3}G_{4}}$$

$$E_{R1}$$