Automatic control

Homework number: [1]

Student name:_____

Student registration number:_____

Class number: ○ class [1] 10:10 – 11:00   ○ class [2] 8:10 – 9:00

Assignment: draw block diagram for the following systems if you know that G and H refer to transfer functions and y for variables:

System #1: assume y_1 is input and y_4 is output

$$y_2 = G_1 y_1 - H_1 y_3$$
$$y_3 = G_2 y_2 - H_2 y_4$$
$$y_4 = G_3 y_3 + G_4 y_4$$

System #2: assume y_1 is input and y_5 is output

$$y_2 = G_1 y_1 - H_1 y_4$$
$$y_3 = G_2 y_2 - H_2 y_5$$
$$y_4 = G_3 y_3 + G_5 y_2$$
$$y_5 = G_4 y_4$$