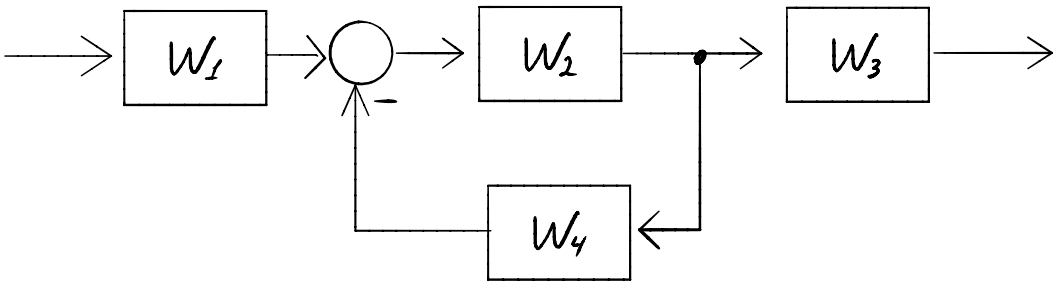
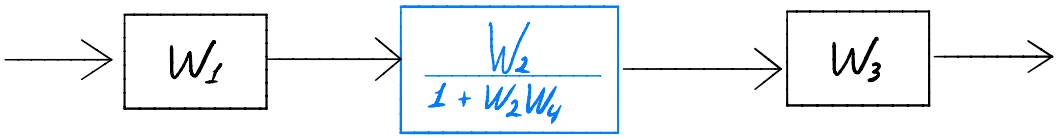
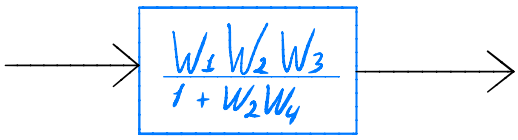
HW2. Ex2. Vao C.

Ex 2.1 Calculations







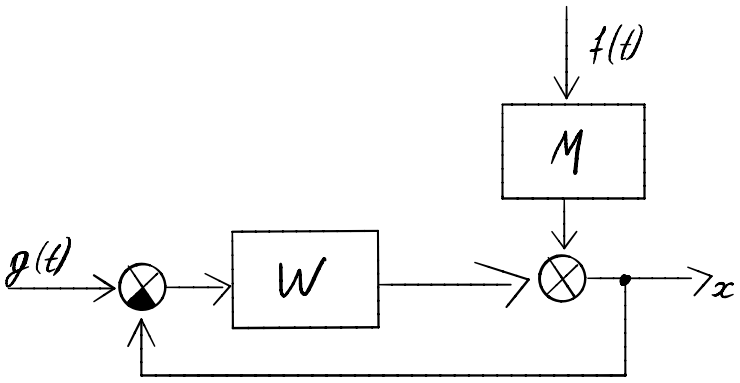
(c) $W_1 = \frac{2}{s^2+s-2}$, $W_2 = \frac{1}{3s+2}$, $W_3 = \frac{s+1}{s+0.3}$, $W_4 = \frac{1}{s+0.2}$

$$\frac{2(s+1)}{(s^2+s-2)(3s+2)(s+0,3)} \cdot \frac{1}{1 + \frac{1}{(3s+2)(s+0,2)}}$$

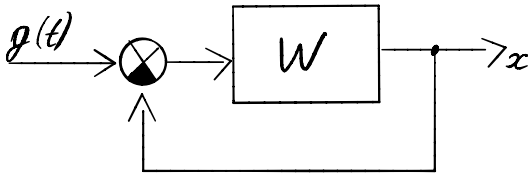
$$\frac{100s^2 + 120s + 20}{150s^5 + 325s^4 - 165s^3 - 220s^2 - 197s - 42}$$

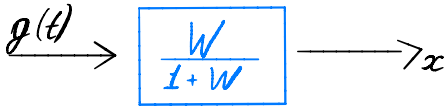
HW2. Ex 3. Vaoc.

Ex 3 Calculations

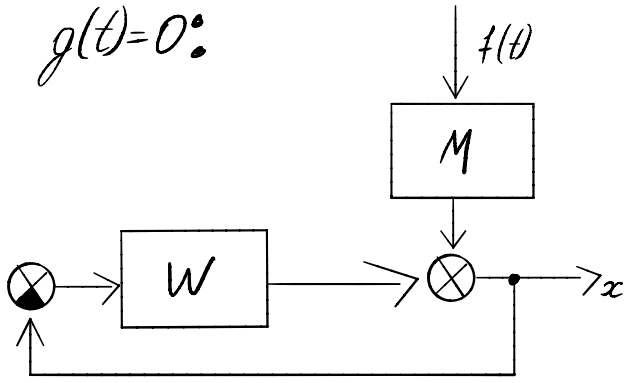


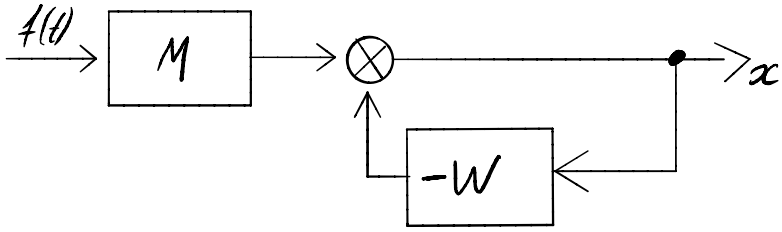
for $f(t)=0$:

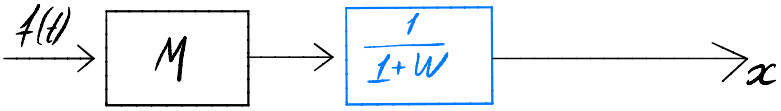


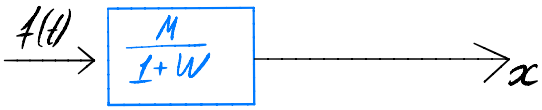


for $g(t)=0$:

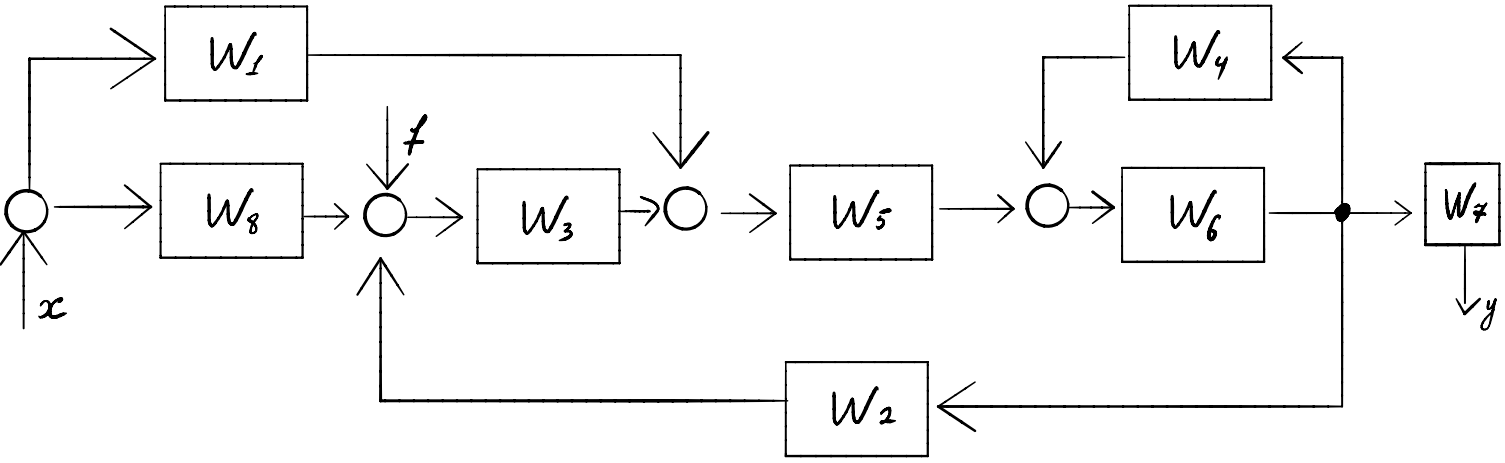


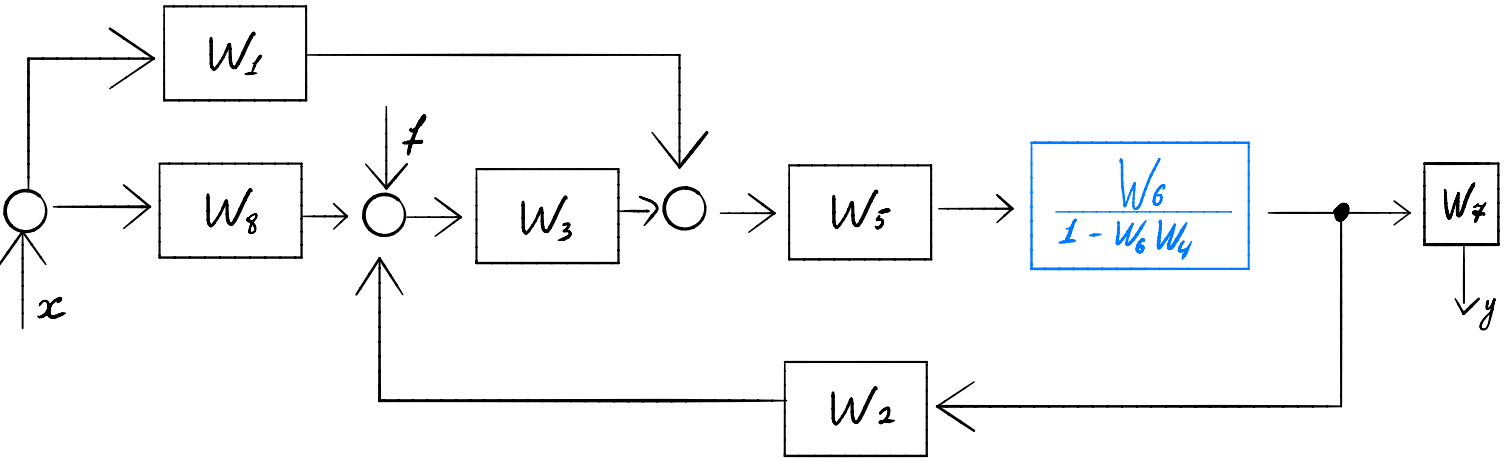


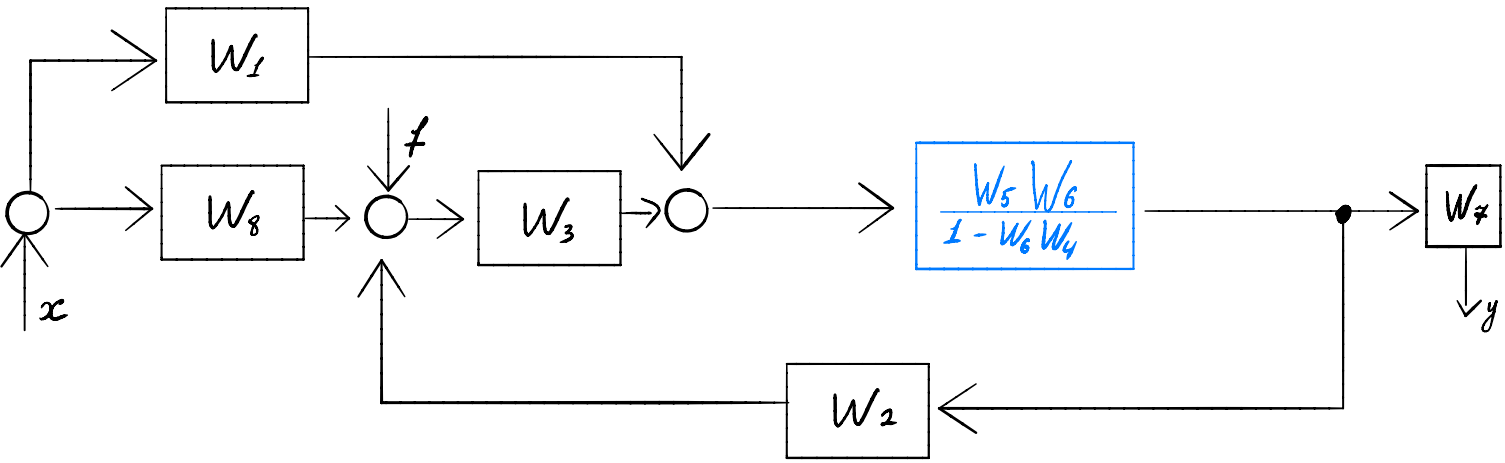


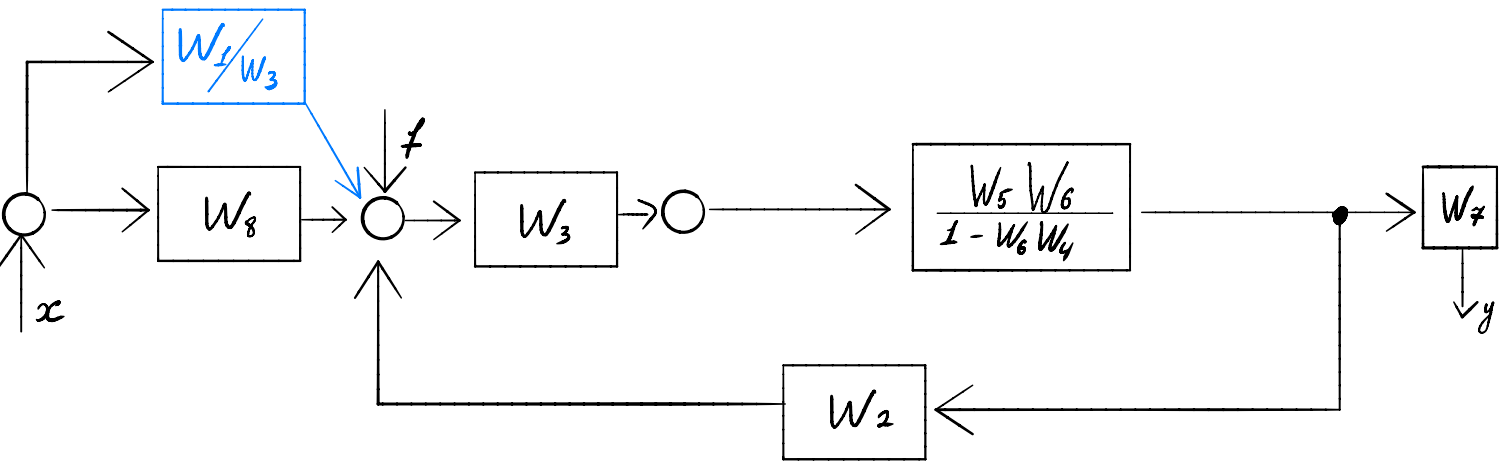


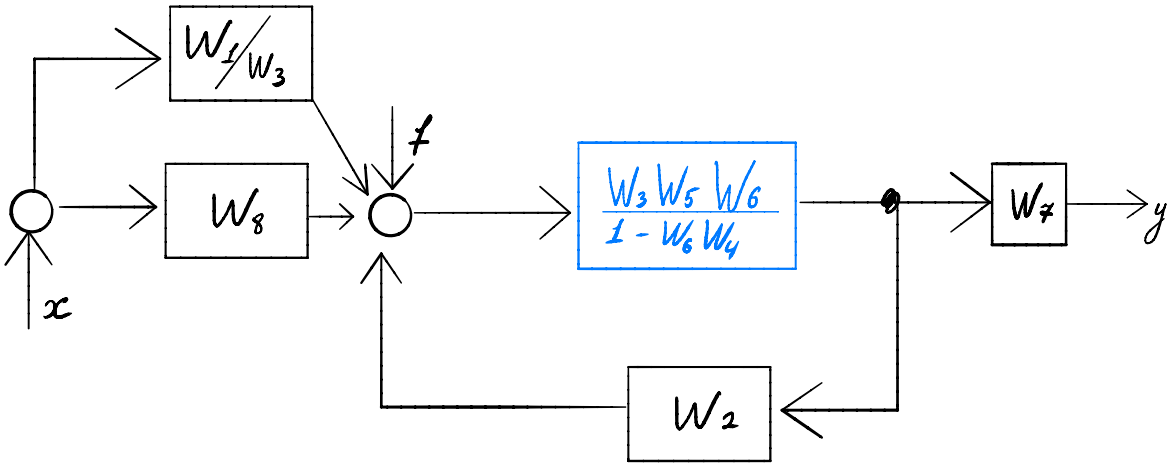
HW2. Ex 6. Vao C.

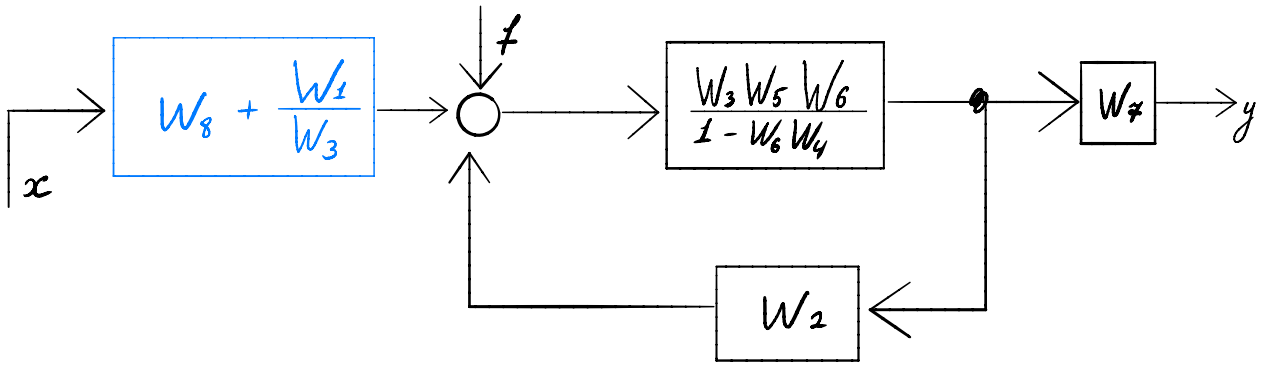

W1
W4
W8
f
W3
W5
W6
W7
x
y
W2


W1
W8
f
W3
W5
W6 / (1 - W6 W4)
W7
x
y
W2


W1
W8
f
W3
W5 W6 / (1 - W6 W4)
W7
x
y
W2


W1/W3
W8
f
W3
W5 W6 / (1 - W6 W4)
W7
x
y
W2





$$\frac{\dfrac{W_3 W_5 W_6}{1 - W_6 W_4}}{1 - \dfrac{W_2 W_3 W_5 W_6}{1 - W_6 W_4}} = \frac{W_3 W_5 W_6}{1 - W_6 W_4 - W_2 W_3 W_5 W_6}$$