Lab Session 05

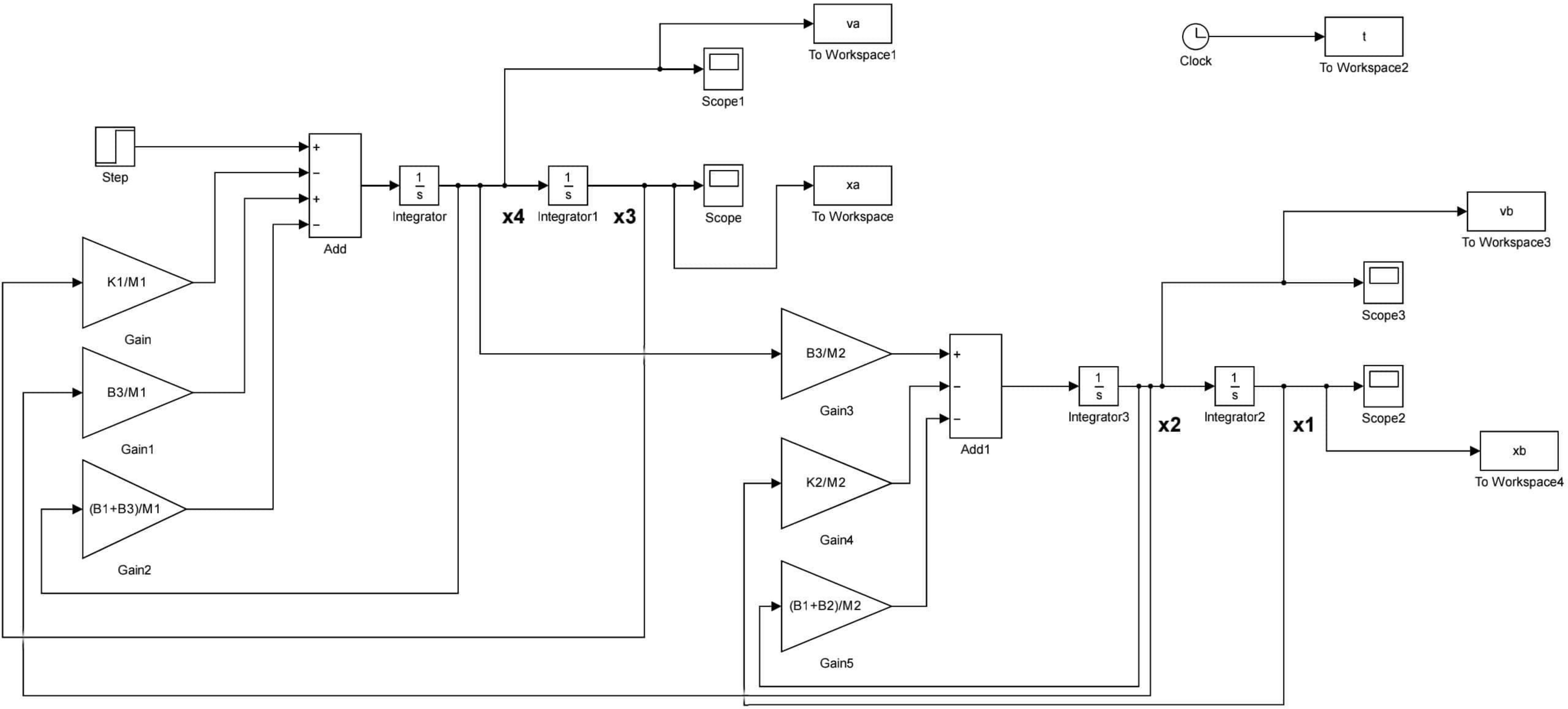
Exercise:

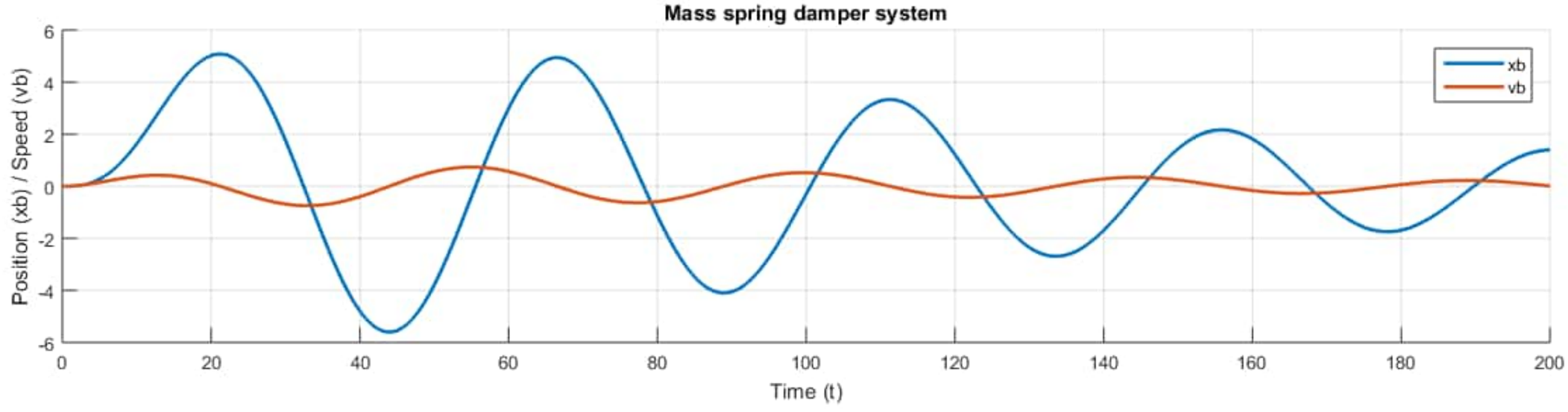
Question 1:

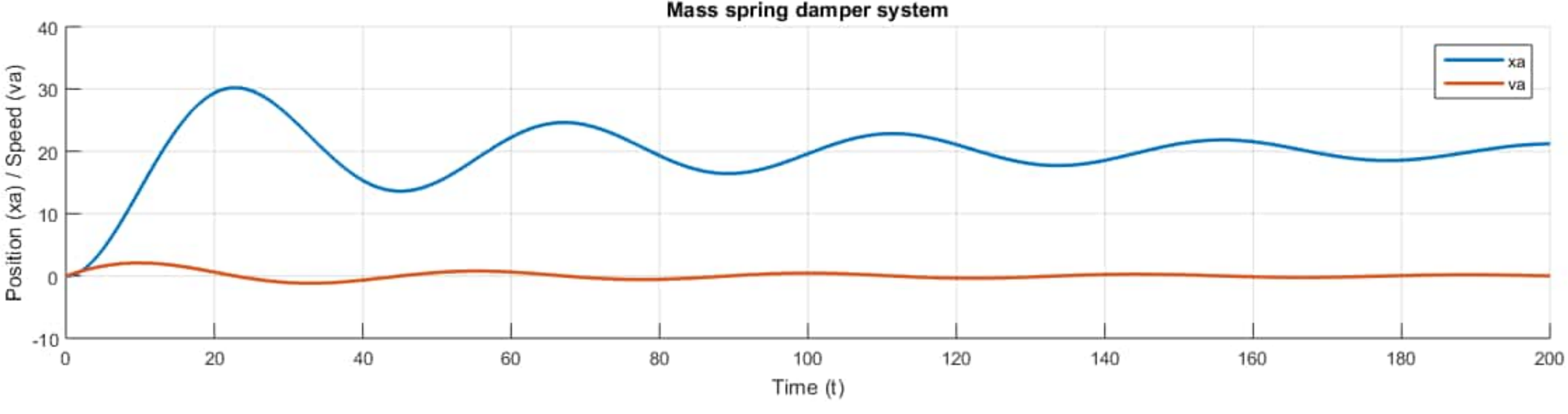
Using MATLAB SIMULINK, model a system present in lab session 3 and 4. Use the same values of R, L, C and M, B, K as given in these lab sessions. Attach the created SIMULINK model with this document. Plot the same outputs as mentioned in lab session 4 and 5.
[*Use separate A4 sheets for plots and attach it with this document*]

Nothing to write below this line. Just attach model and plots with this document.

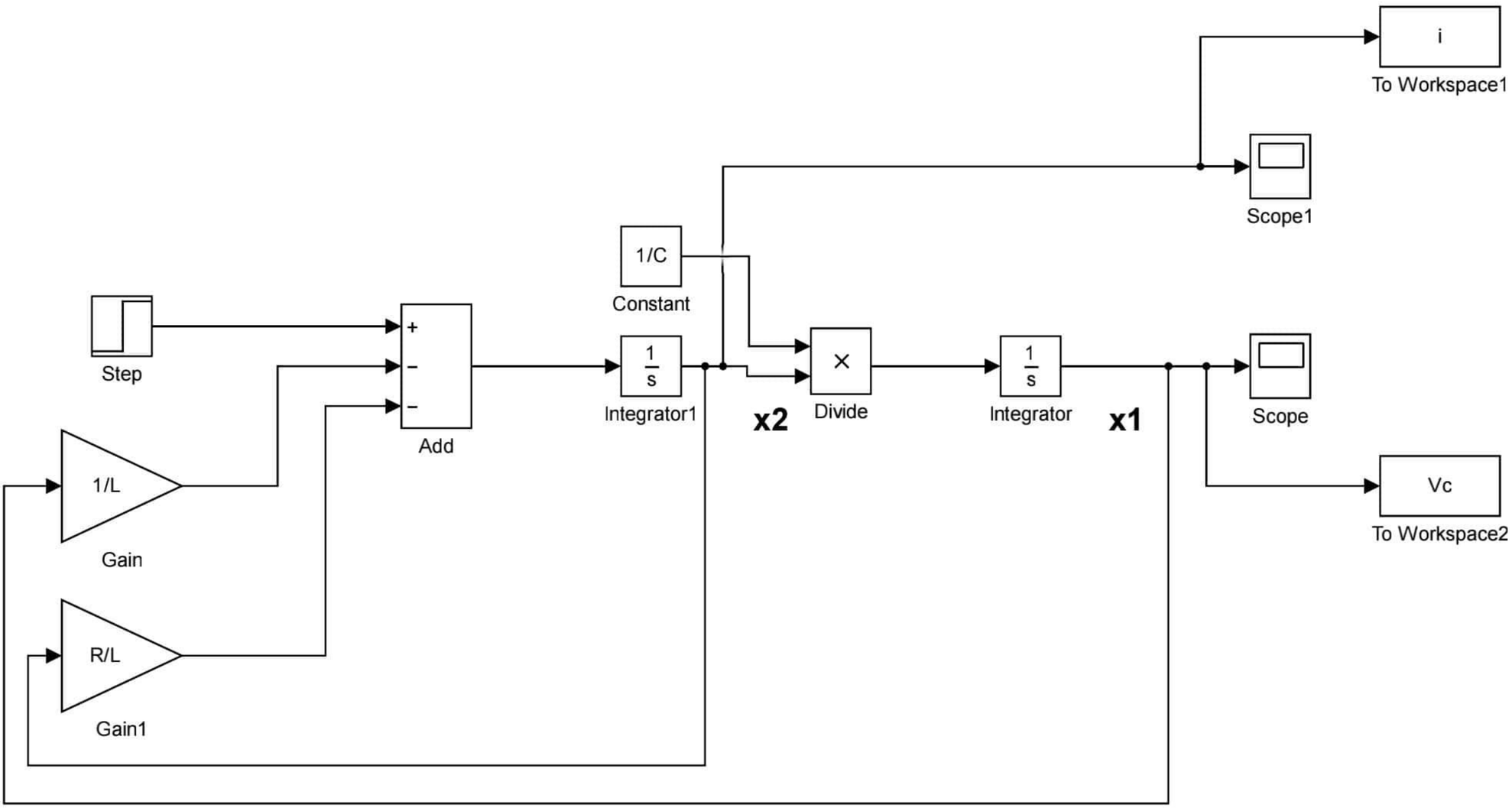
MKB Simulink Model

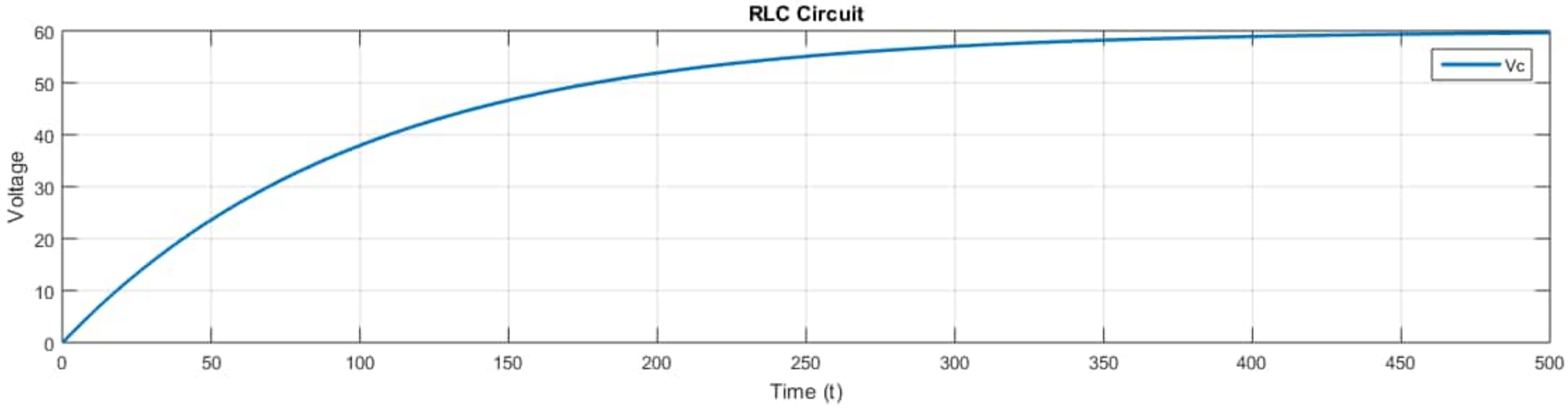


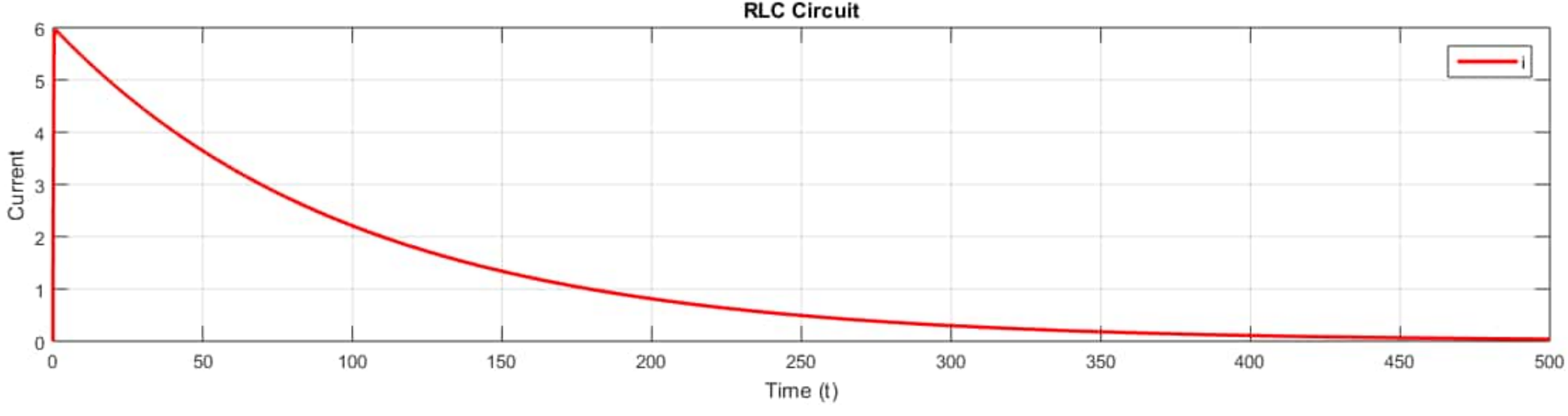

Mass spring damper system
Position (xb) / Speed (vb)
Time (t)
xb
vb
6
4
2
0
-2
-4
-6
0
20
40
60
80
100
120
140
160
180
200


Mass spring damper system
Position (xa) / Speed (va)
Time (t)
xa
va
40
30
20
10
0
-10
0
20
40
60
80
100
120
140
160
180
200

RLC Simulink Model




RLC Circuit
Voltage
Time (t)
Vc
0
10
20
30
40
50
60
0
50
100
150
200
250
300
350
400
450
500


RLC Circuit
Current
Time (t)
i
0
1
2
3
4
5
6
0
50
100
150
200
250
300
350
400
450
500