**Sofia Menacho Vargas**

**Problem 1 :6.7**

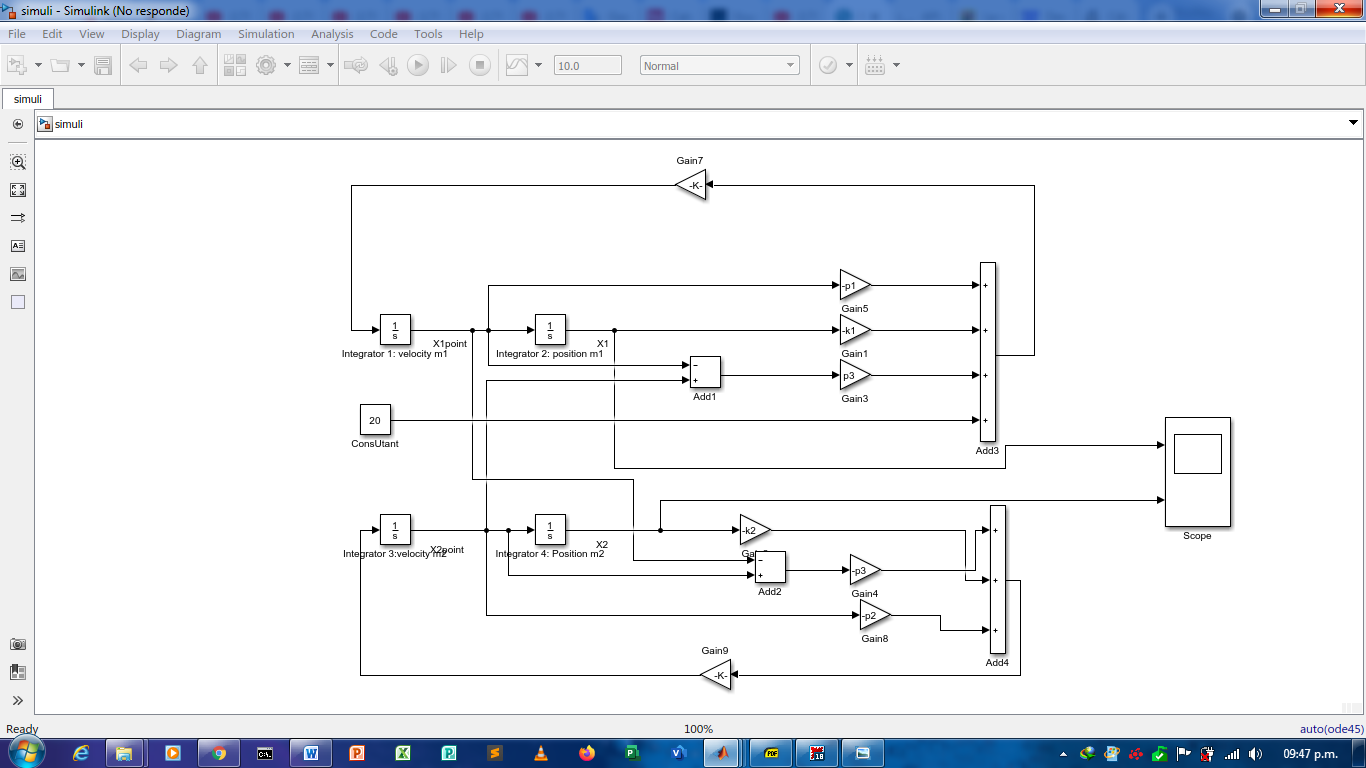
**differential equations**



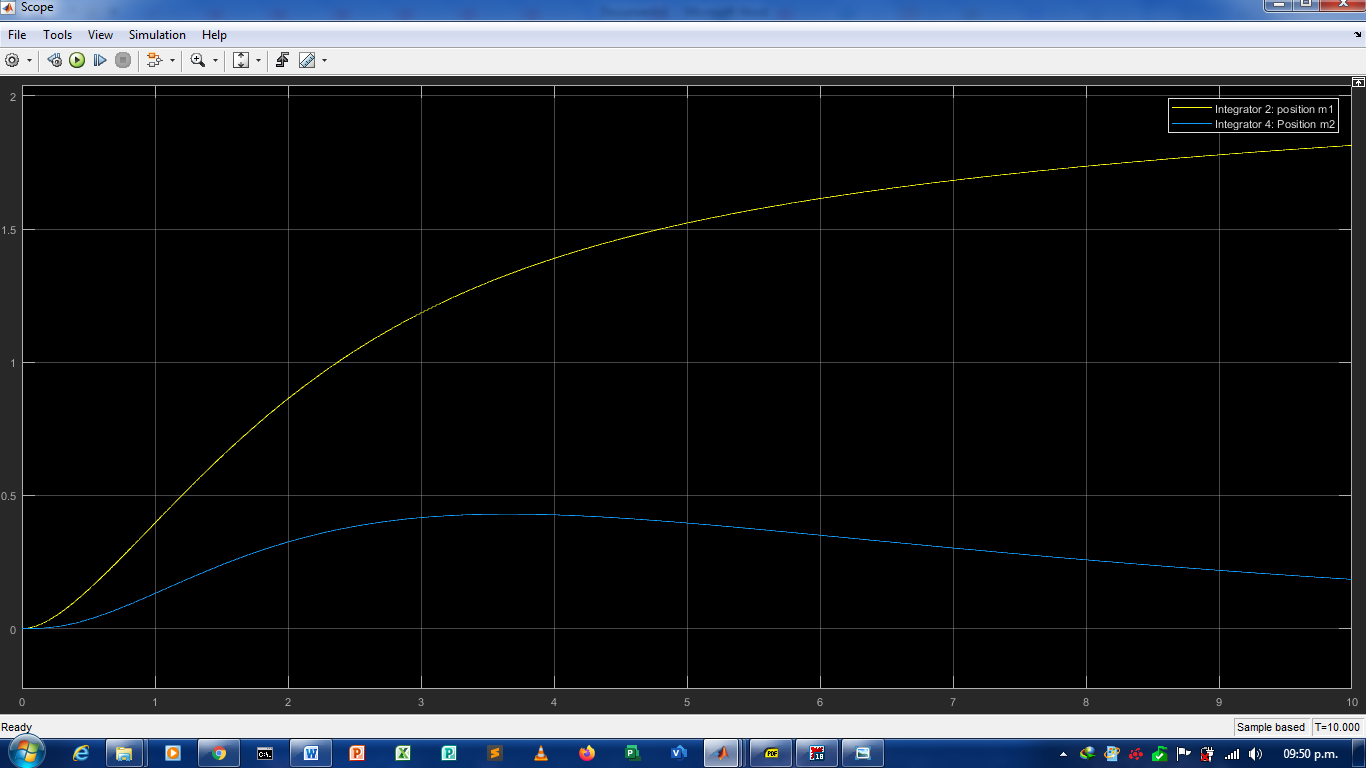




**blocks diagram**



**Graphics**



**analytical solution**

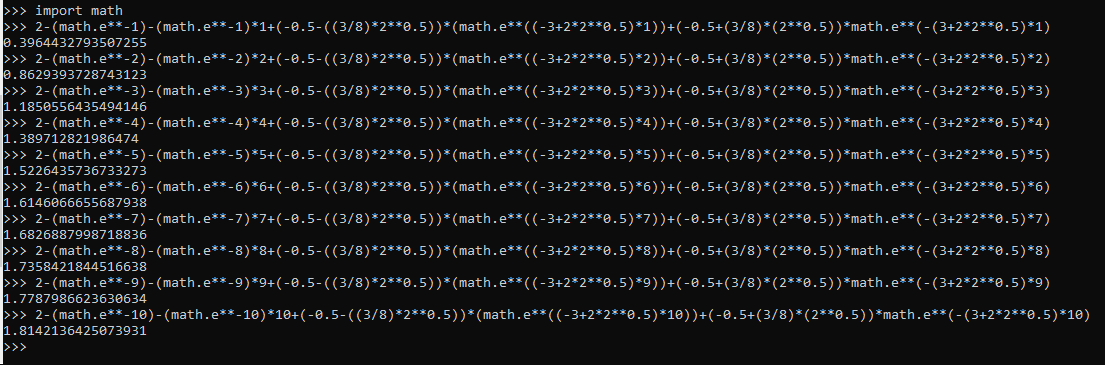
a system of 4-order differential equations

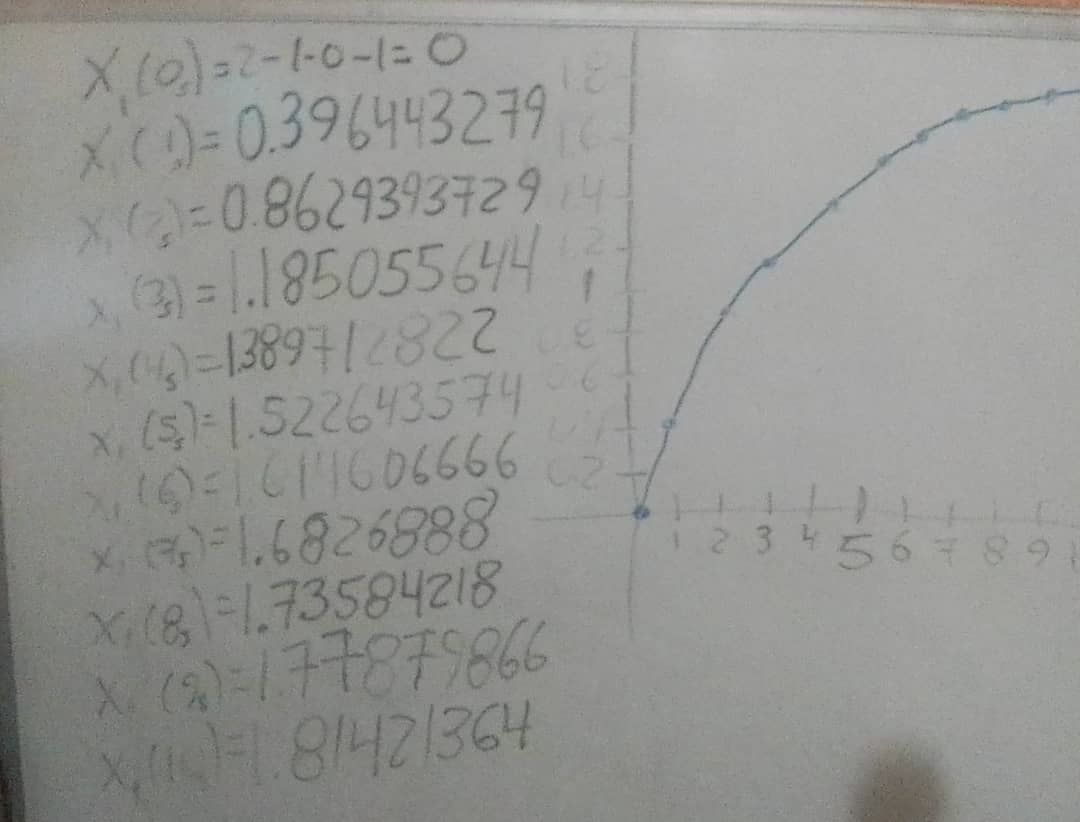


**Solution x1(t):**



values ​​of x1 (t) from t = 0 to t = 10:





**Solution x2(t)**

 values ​​of x1 (t) from t = 0 to t = 10:

