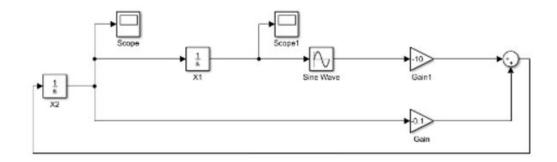
(b) Simulation model of the system in Simulink is as follows:



After putting the values, I get the equation of X2' as follows:

	Block Parameters: X1	×
	Intial condition source: internal	
	Continuous-time intervation of the input signal.	
	iew ag 3	100
ore'	External reset:	•
	Initial condition source: internal	-
	Initial condition:	
	1	:
	Limit output	1992
	Wrap state	
	Show saturation port	
	Show state port	
	Absolute tolerance:	
	auto	
	Ignore limit and reset when linearizing	
	Enable zero-crossing detection	
	State Name: (e.g., 'position')	
	"	