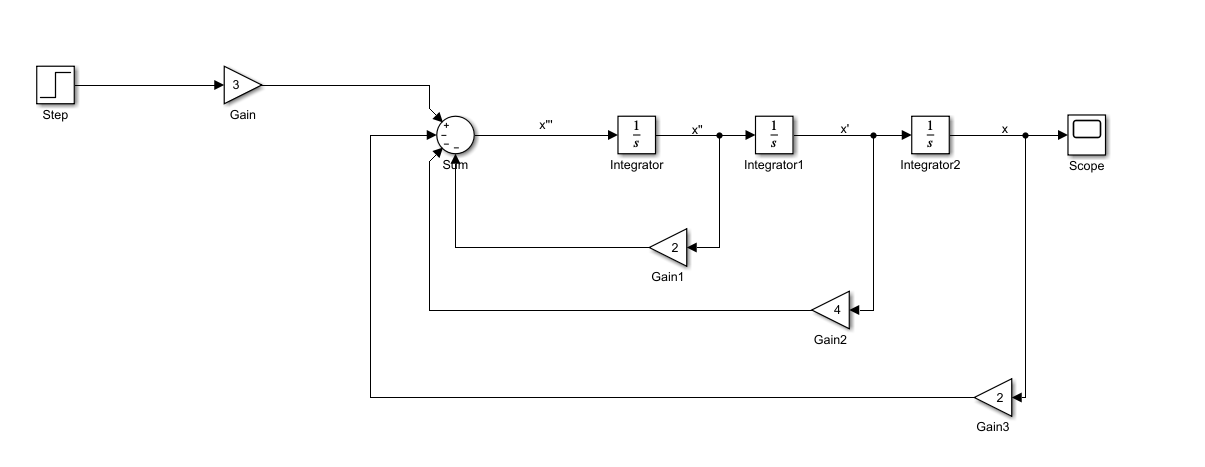
**TRADITIONAL METHOD**

1)x’’’=3\*u(t) – 2\*x’’-4\*x’-2\*x

Given: x’(0)=1, x’’(0)=2, x’’’(0)=3

**SIMULINK MODEL**

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**GRAPH**

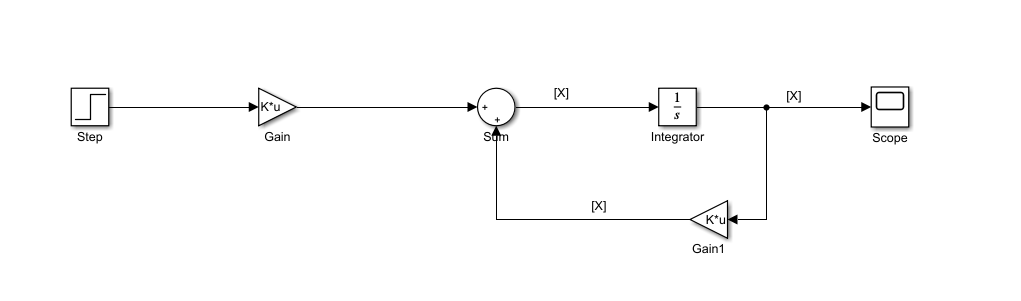


**MATRIX METHOD**

2) 3\*x’’’=9\*u(t) – 6\*x’’-12\*x’-6\*x

Given: initial condition=0

**SIMULINK MODEL**



**GRAPH**

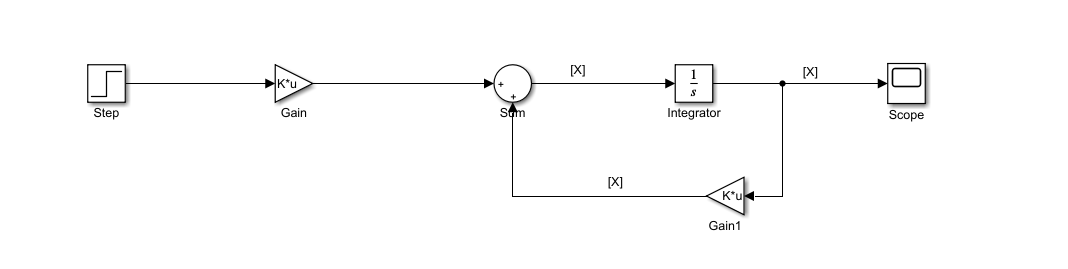
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**MATRIX METHOD**

3) 2\*x’’’+5\*x’’+9\*x’+3\*x=3\*u(t)

Given: initial condition=0

**SIMULINK MODEL**



**GRAPH**

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