

```
commandwindow
```

```
clc
```

```
clear all
```

```
t = 0:0.001:1
```

```
n = -0.42*exp(3*t) + 1.46*exp(-4*t) - 12*t.^3  
+3*t.^2 +6.5*t - 1.08
```

```
plot(t,n)
```

```
xlabel('time(hr)')
```

```
ylabel('amount(kgmol)')
```



```
commandwindow
```

```
clc
```

```
clear all
```

```
x = 0:0.001:15
```

```
y = exp(0.01)*((80*sin(0))+(122*cos(0)))-0.
```

```
64*x.^2+0.8*x-123.08
```

```
plot(x,y)
```

```
xlabel('x(unit)')
```

```
ylabel('y')
```