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15/ENG04/027

MECHATRONICS

QUESTION(1A)

commandwindow

clear

clc

close all

t=0:0.001:1

n=7\*exp(-3\*t)-2\*exp(4\*t)-12\*t.^(3)+3\*t.^(2)-6.5\*t

plot(t,n)

grid on

grid minor

xlabel('time(hr)')

ylabel('n(kgmol)')

QUESTION(1B)

commandwindow

clc

clear

close all

x = 0 : 0.001 : 15

y = (((0.5\*(2.5.^(2)))/(4\*30\*5))\*x.^(2)) - ((0.5\*2.5)/(6\*30\*5)\*x.^(3)) + (0.5/(24\*30\*5)\*x.^(4))

plot (x,y)

grid on

grid minor

title('Graph of y against x')