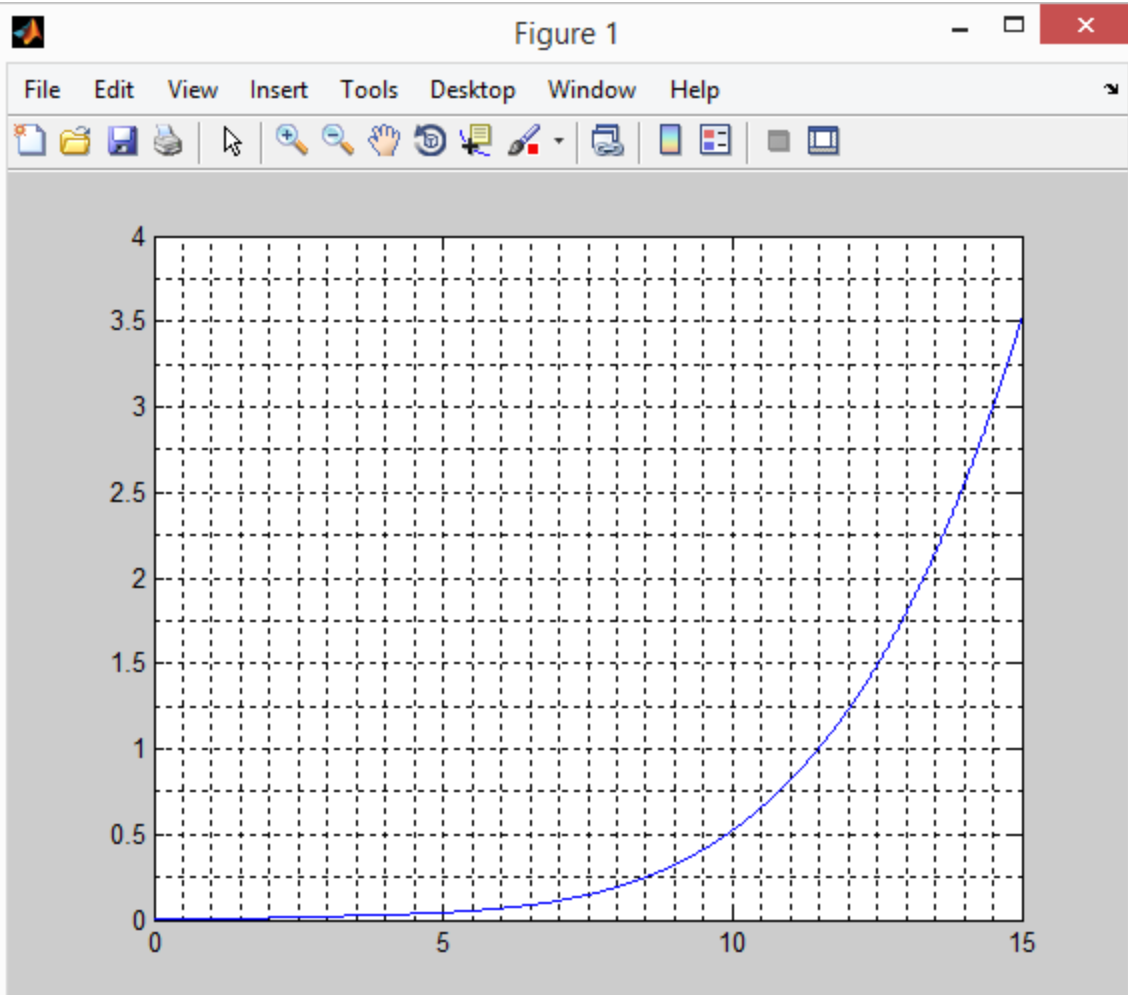


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## QUESTION 1A

1. commandwindow
2. clear
3. close
4. syms x
5.  $y = ((37.5/7200)*(x^2)) - ((10/7200)*(x^3)) + ((1/7200)*(x^4));$
6. xn = 0:0.001:15;
7. yn = subs (y,xn);
8. yn = double (yn);
9. plot (xn,yn)
- 10.grid on
- 11.grid minor
- 12.xlable ( ' ' )
- 13.ylabel ( ' ' )



## QUESTION 1B

1. `commandwindow`
2. `clear`
3. `close`
4. `syms t`
5. `n1 = (3 * exp(4*t)) + (2 * exp(-3*t)) + (-12*t^3) + (3*t^2) + (-6.5*t);`
6. `tn = 0:0.001:1;`
7. `n1n = subs (n1,tn);`
8. `n1n = double (n1n);`
9. `plot (tn,n1n)`
10. `grid on`
11. `grid minor`
12. `xlabel ('time(hr)');`
13. `ylabel ('amount(kgmol)');`

