



## TP N° 4-Graphique-Matlab

### Exercice 1 :

1) Effectuer les commandes suivantes et expliquer brièvement chaque ligne.

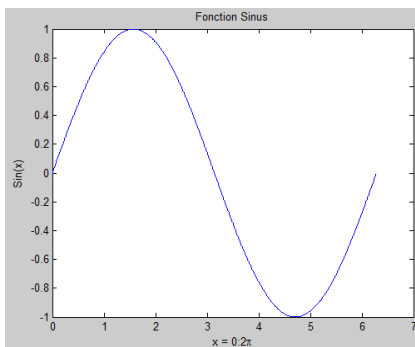
<pre>&gt;&gt; figure; %ligne1 &gt;&gt; figure; %ligne2 &gt;&gt;(gcf %ligne3 &gt;&gt; get(1) %ligne4</pre>	<pre>&gt;&gt; figure(4); %ligne5 &gt;&gt; figure(2); %ligne6 &gt;&gt; figure; %ligne7 &gt;&gt; close; %ligne8</pre>	<pre>&gt;&gt; close(1); %ligne9 &gt;&gt; close all; %ligne10</pre>
<pre>&gt;&gt; plot([1 2 4 8 16 32 64 128 256 512 1024]); %ligne11 &gt;&gt; v1 = [1 2 3 4 5 6]; %ligne12 &gt;&gt; v2 = [3 -1 2 4 5 1]; %ligne13 &gt;&gt; plot(v1,v2) %ligne14 &gt;&gt; plot(magic(5)); %ligne15</pre>	<pre>&gt;&gt; figure; %ligne16 &gt;&gt; v1=[0:0.1:2*pi]; %ligne17 &gt;&gt; v2=sin(v1); %ligne18 &gt;&gt; plot(v1,v2) %ligne19 &gt;&gt; figure; %ligne20 &gt;&gt; plot(v1,cos(v1)); %ligne21</pre>	

2) Expliquer le résultat des commandes suivantes :

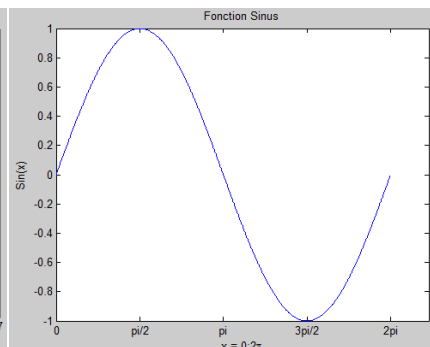
```
>> v1=[0:0.5:2*pi]; v2=[0:0.1:2*pi]; plot(v1, sin(v1)); figure;
plot(v2, sin(v2))
```

### Exercice 2 :

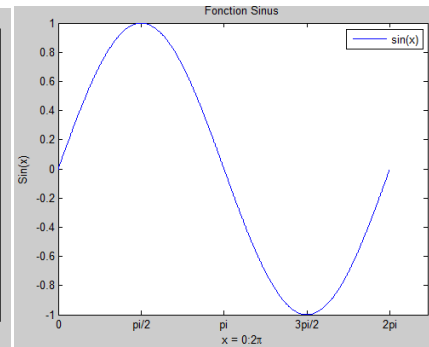
1) Donner les commandes qui permettent de tracer chacune des courbes suivantes :



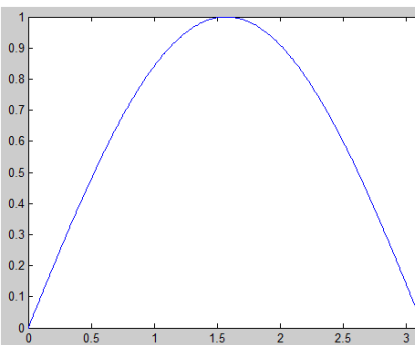
(1)



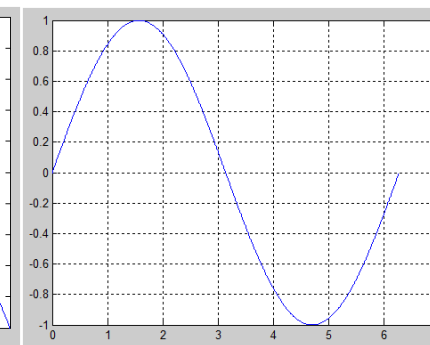
(2)



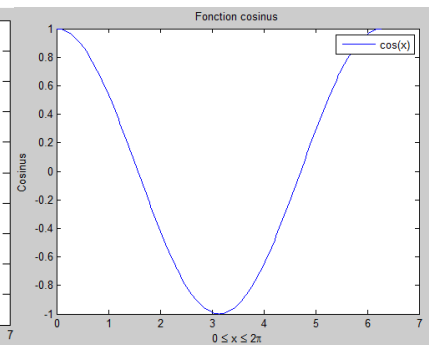
(3)



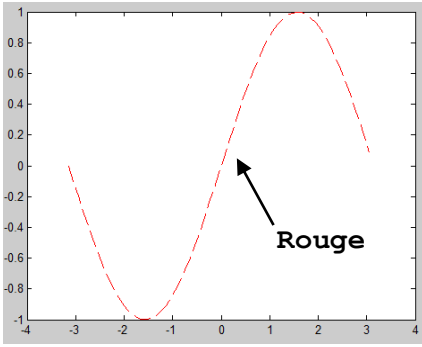
(4)



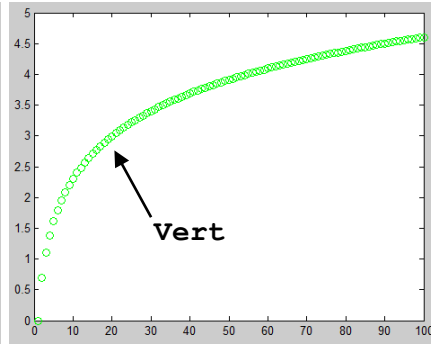
(5)



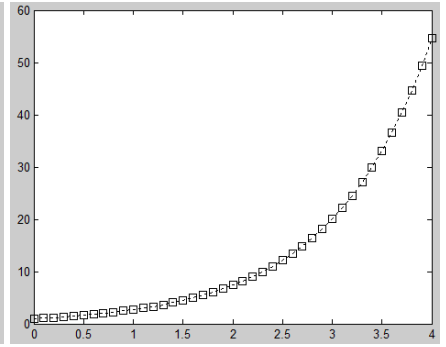
(6)



(7)

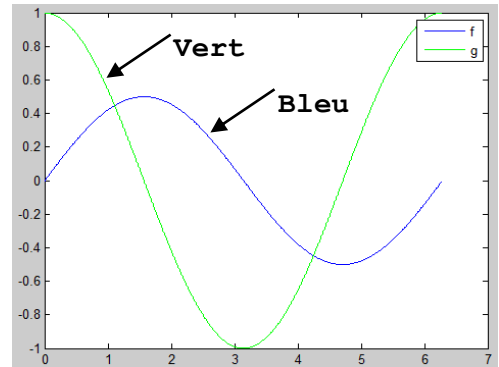


(8)

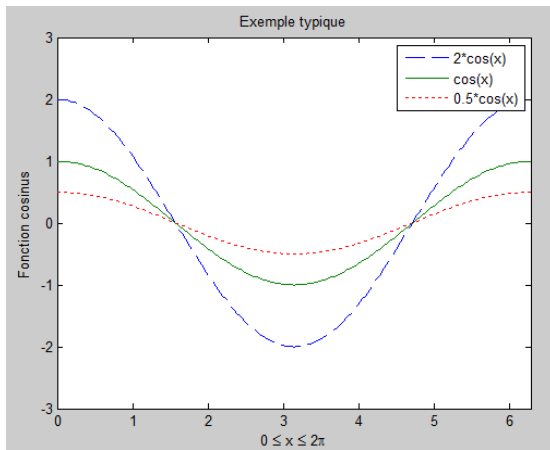


(9)

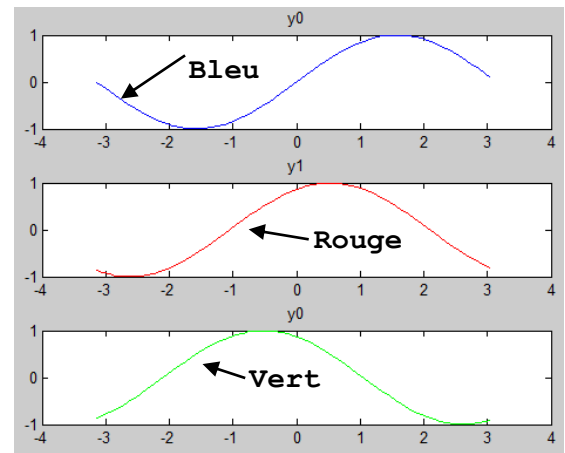
- 2) Donner les commandes qui permettent de tracer la courbe suivante (10) en utilisant deux méthodes différentes.
- 3) Montrer comment désactiver le mode qui permet de superposer plusieurs courbes et revenir au mode de tracé normal.
- 4) Donner les commandes qui permettent de tracer la courbe suivante (11).



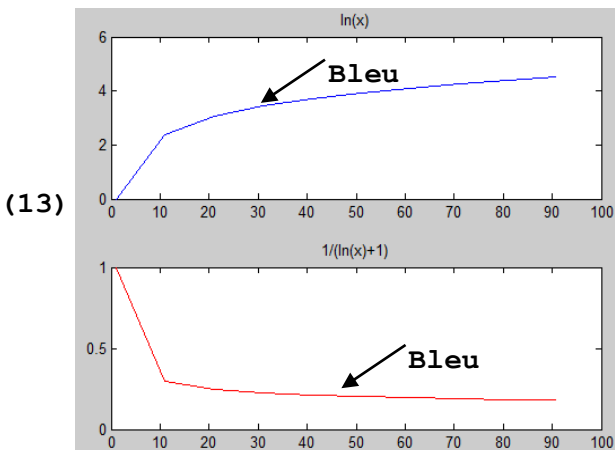
(10)



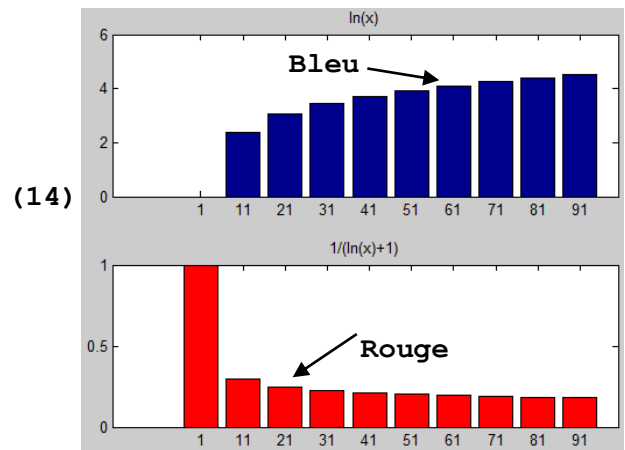
(11)



(12)



(13)



(14)

- 5) Enregistrer les courbes précédentes sous différents formats (jpg, eps, pdf, etc).