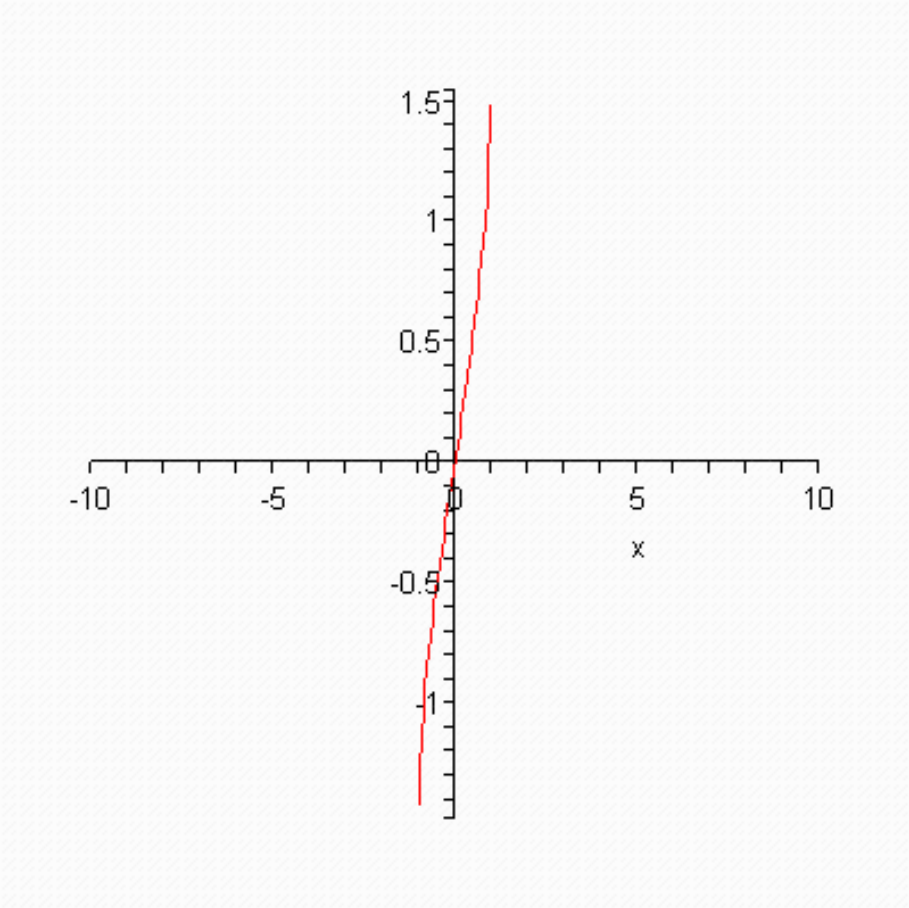
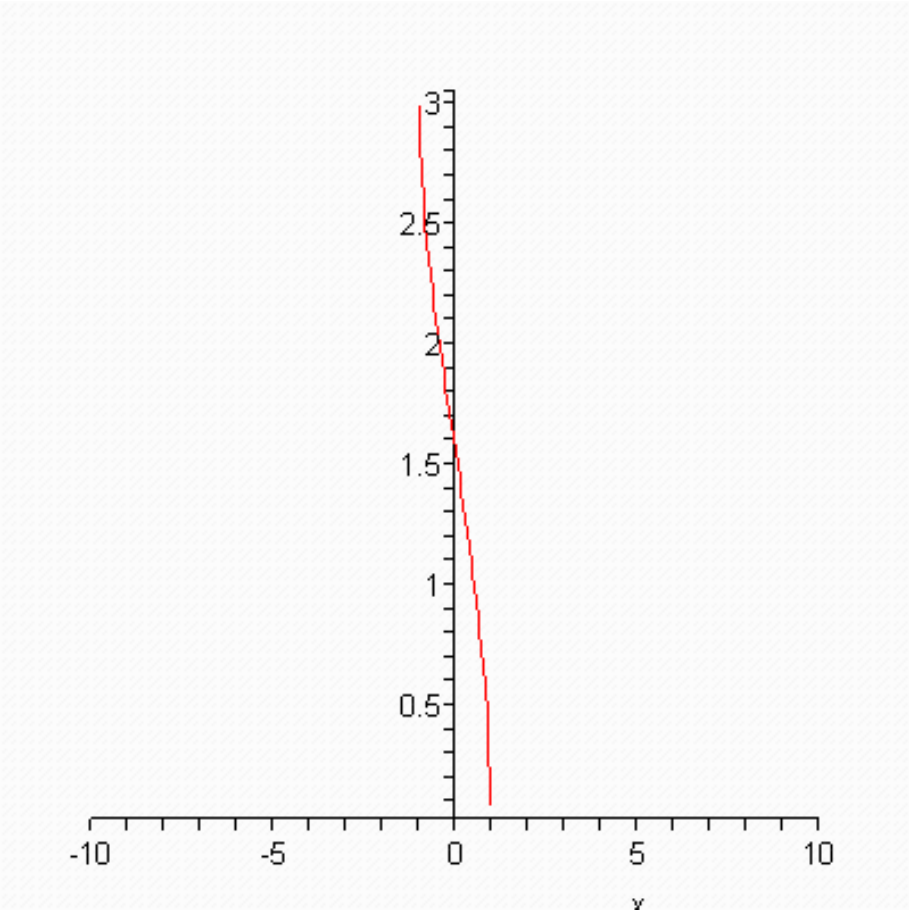
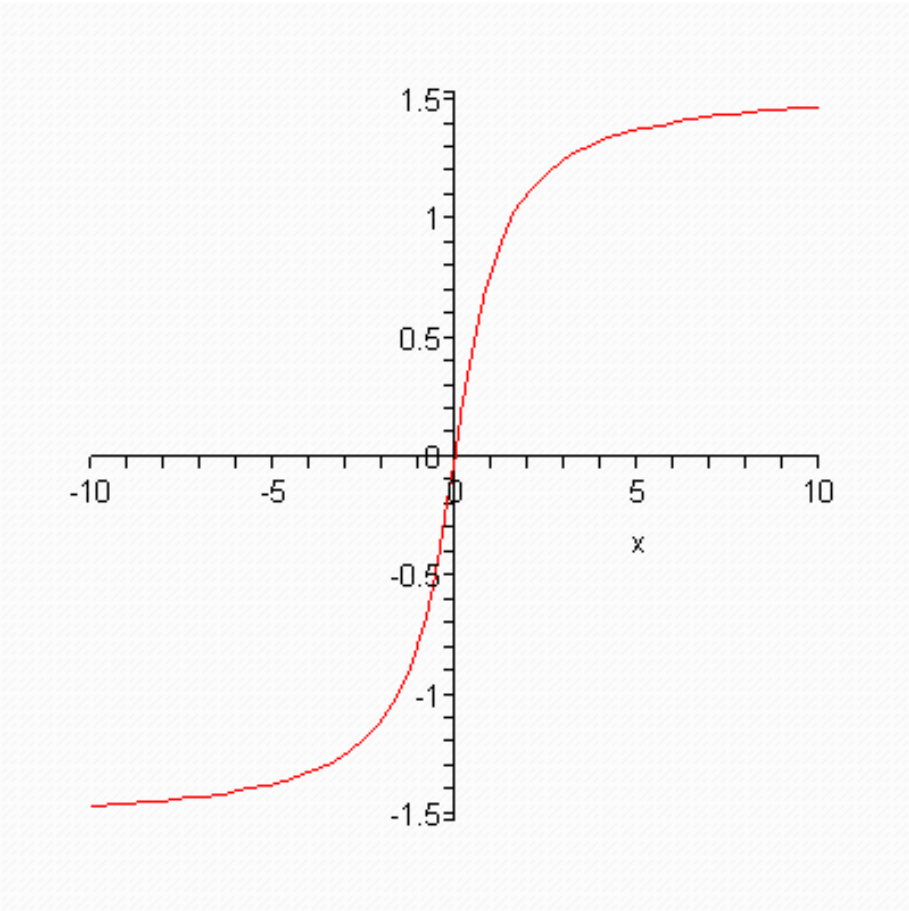
```
> #TP04
> #exo01
> restart;
> with(plots):
Warning, the name changecoords has been redefined
> plot(arcsin(x),x);
```



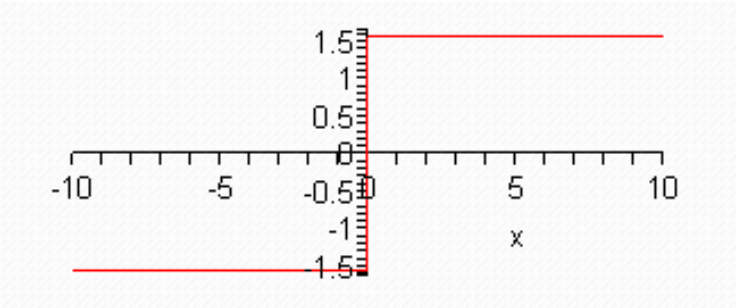

```
> plot(arccos(x),x);
```



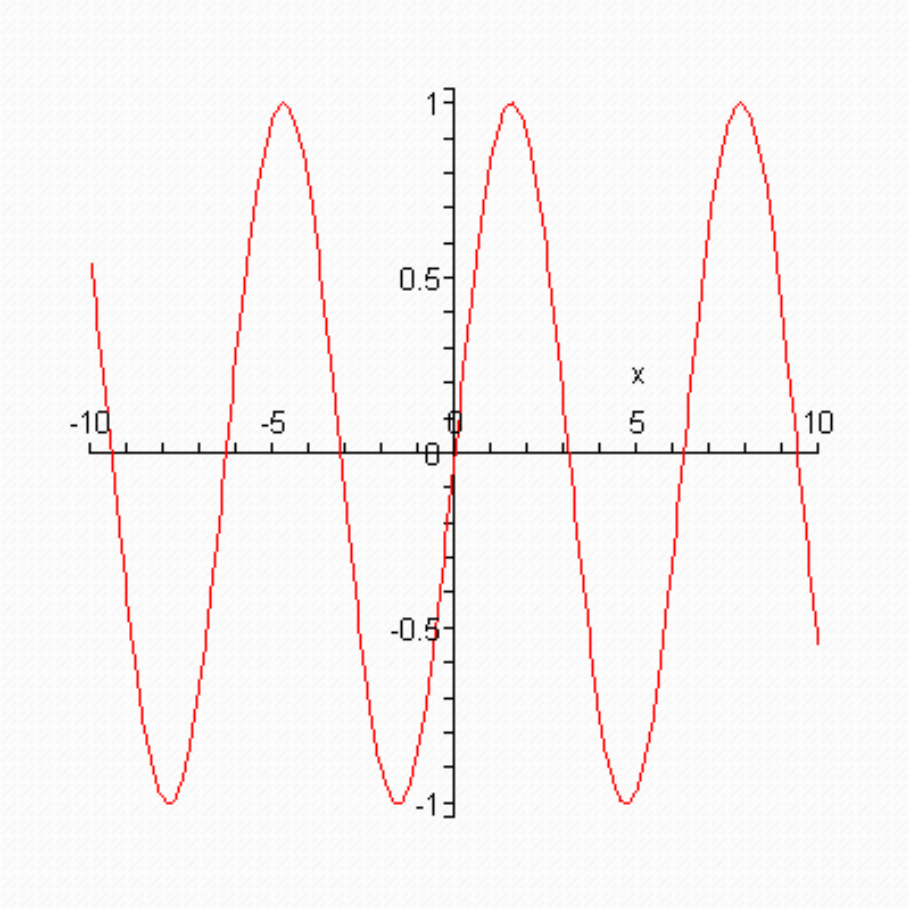

```
> plot(arctan(x),x);
```



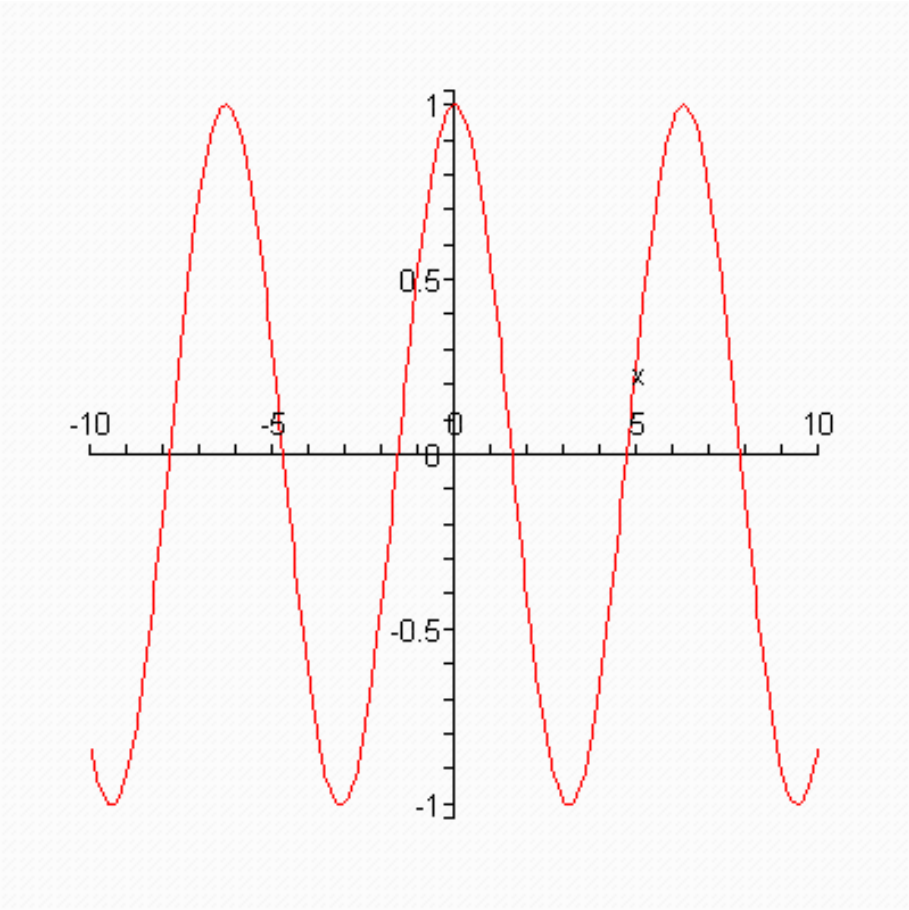
```
> plot(arctan(x)+arctan(1/x),x);
```



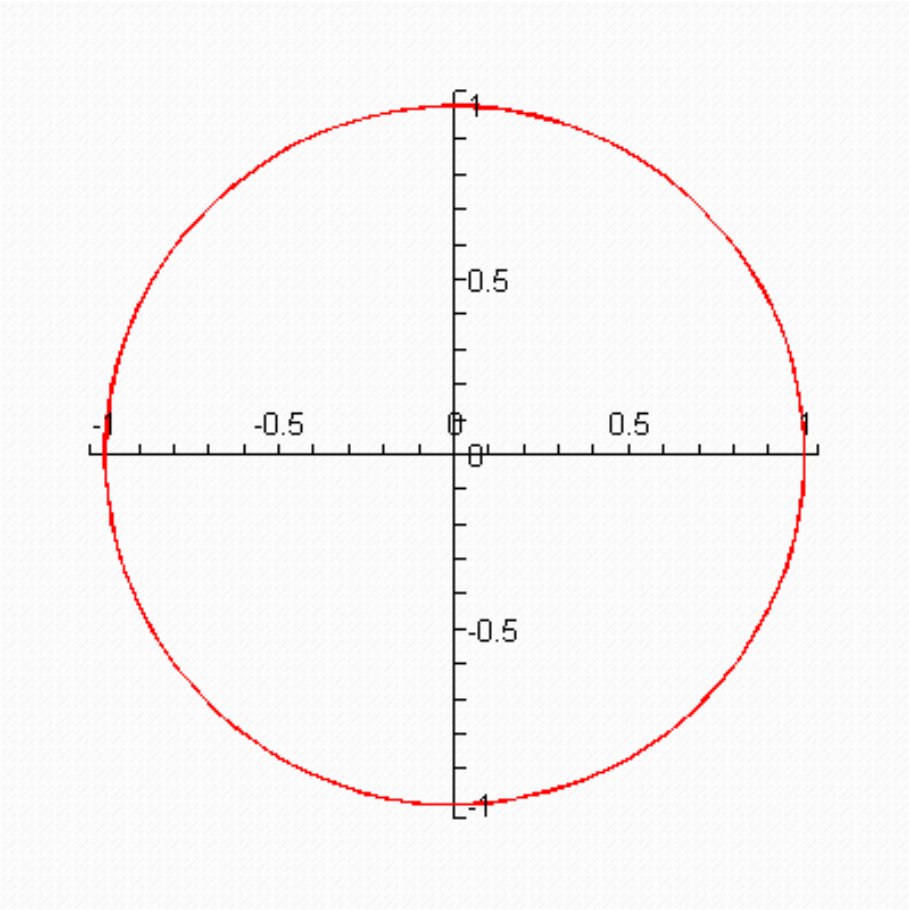

```
> plot(sin(x),x);
```



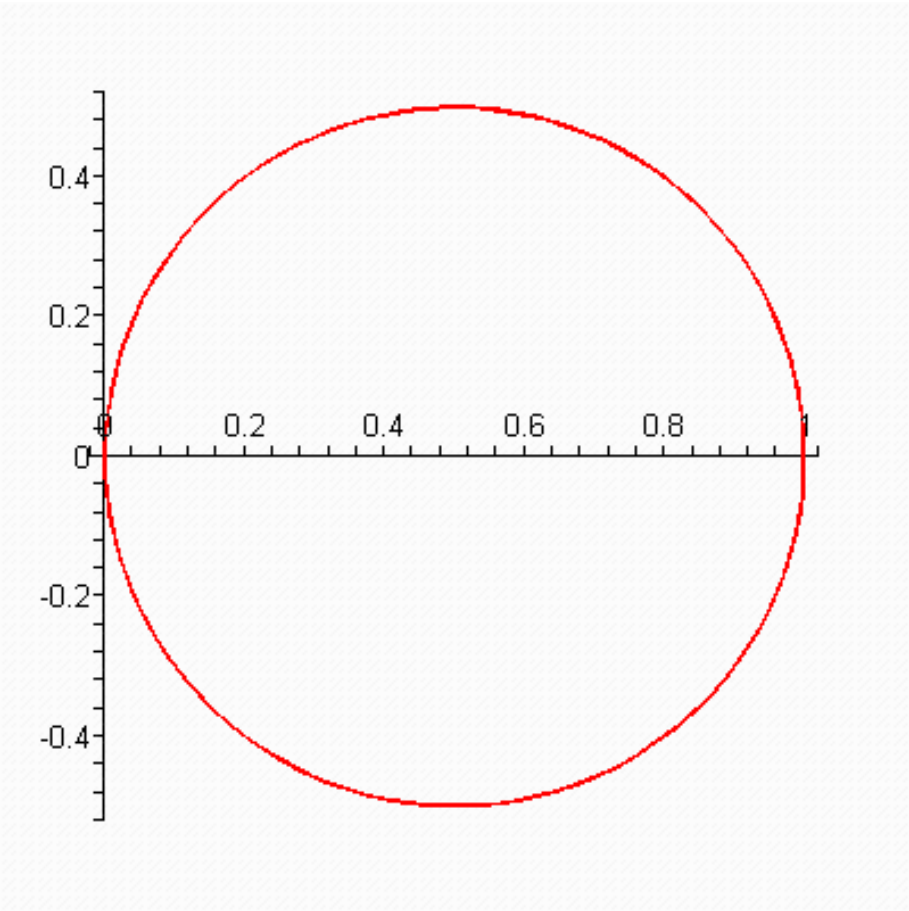

```
> plot(cos(x),x);
```



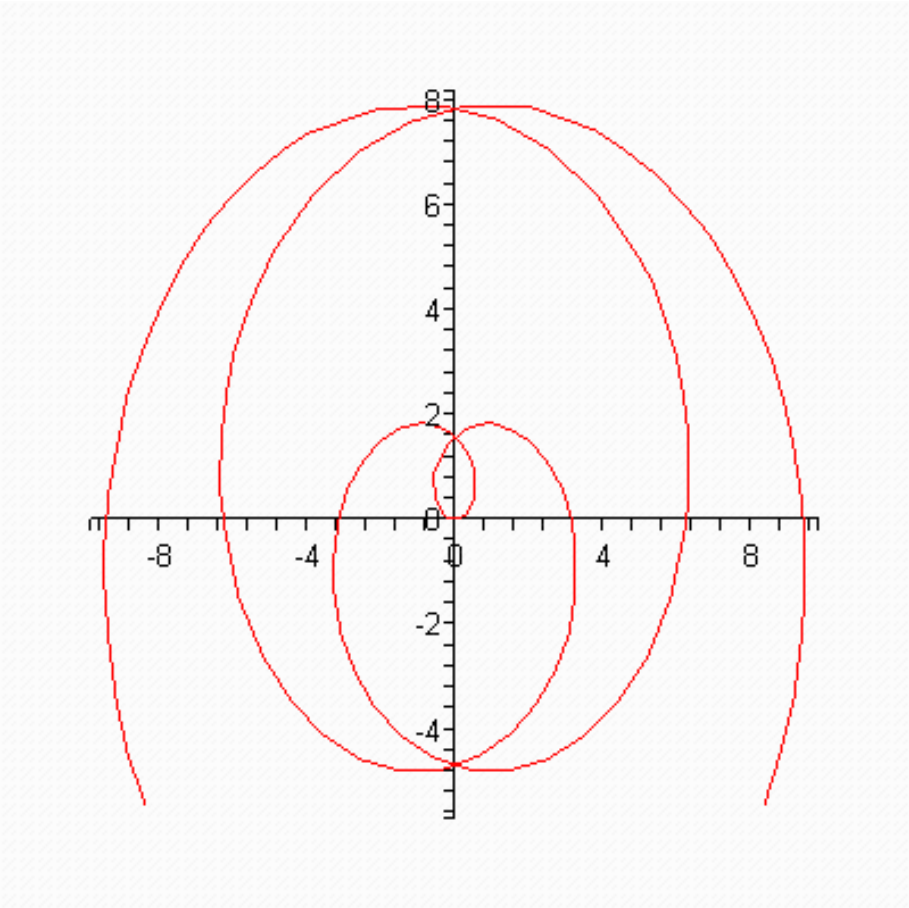

```
> #exo 02
> restart;
> with(plots):
Warning, the name changecoords has been redefined
> plot(1,theta,coords=polar);
```



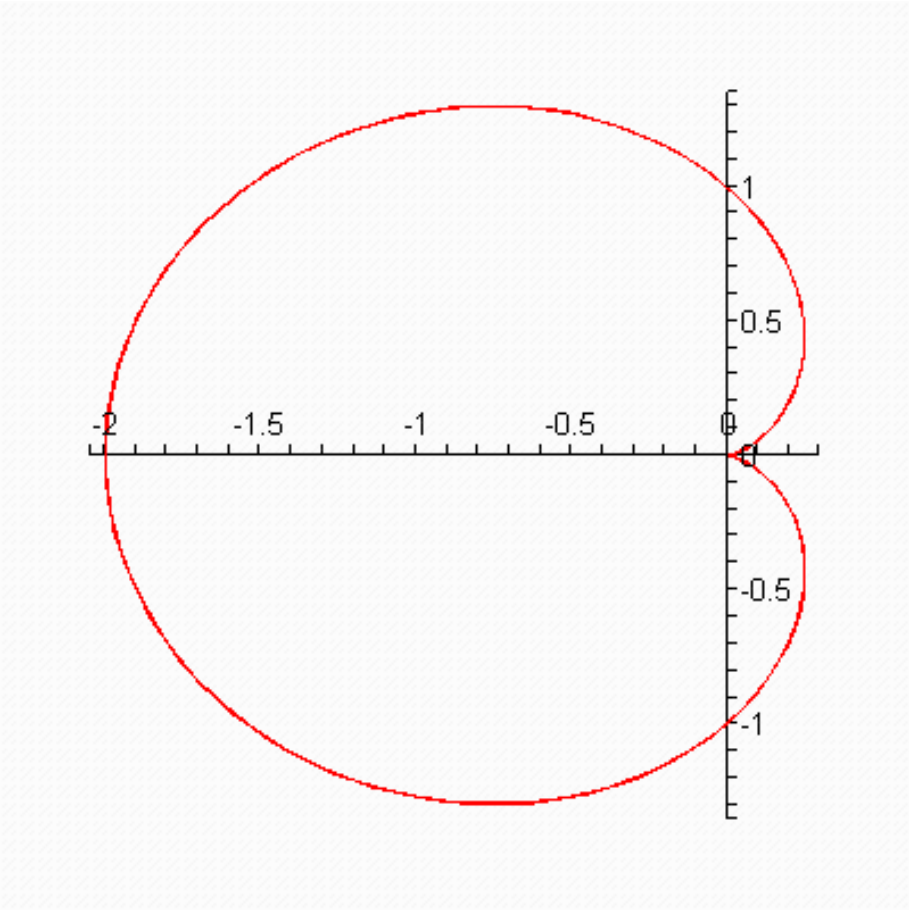

```
> plot(cos(theta),theta,coords=polar);
```



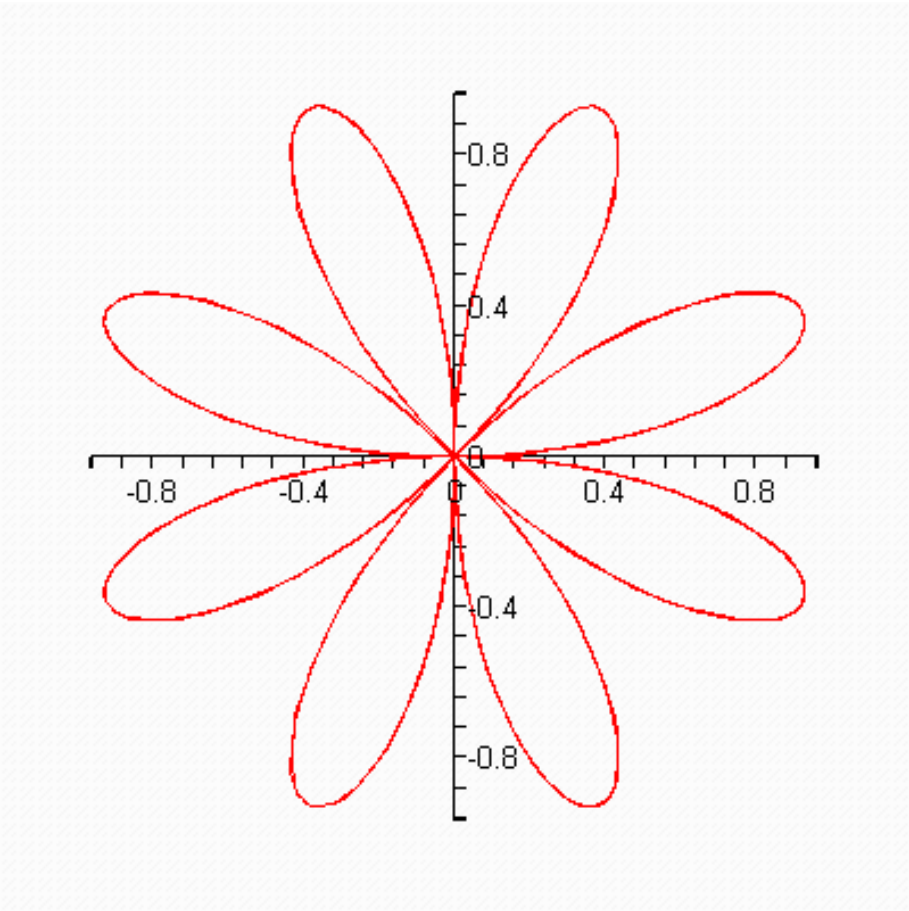
```
> plot(theta,theta,coords=polar);
```



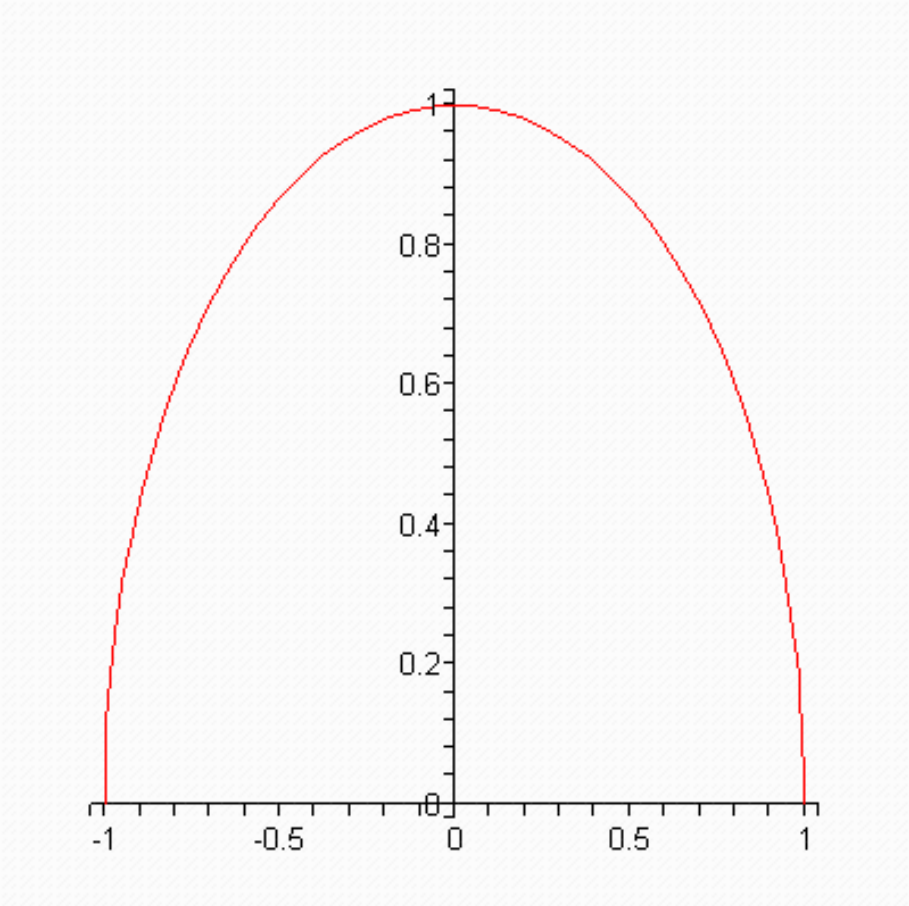

```
> plot(1-cos(theta),theta,coords=polar);
```



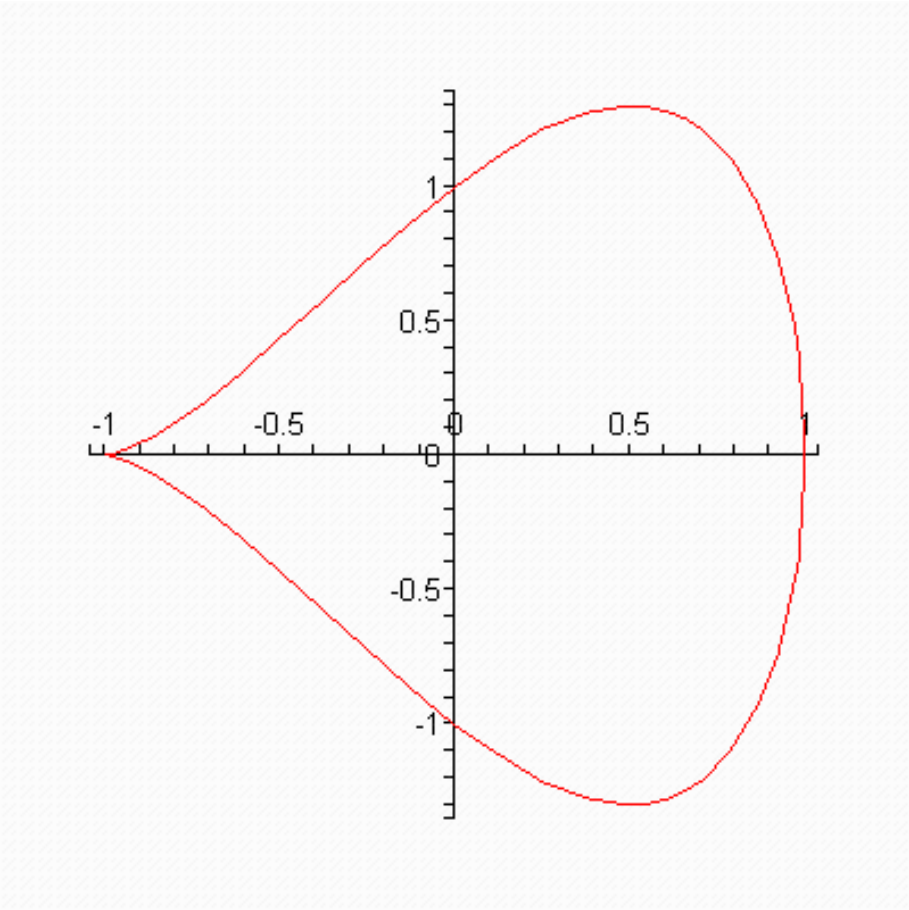

```
> plot(sin(4*theta),theta,coords=polar);
```



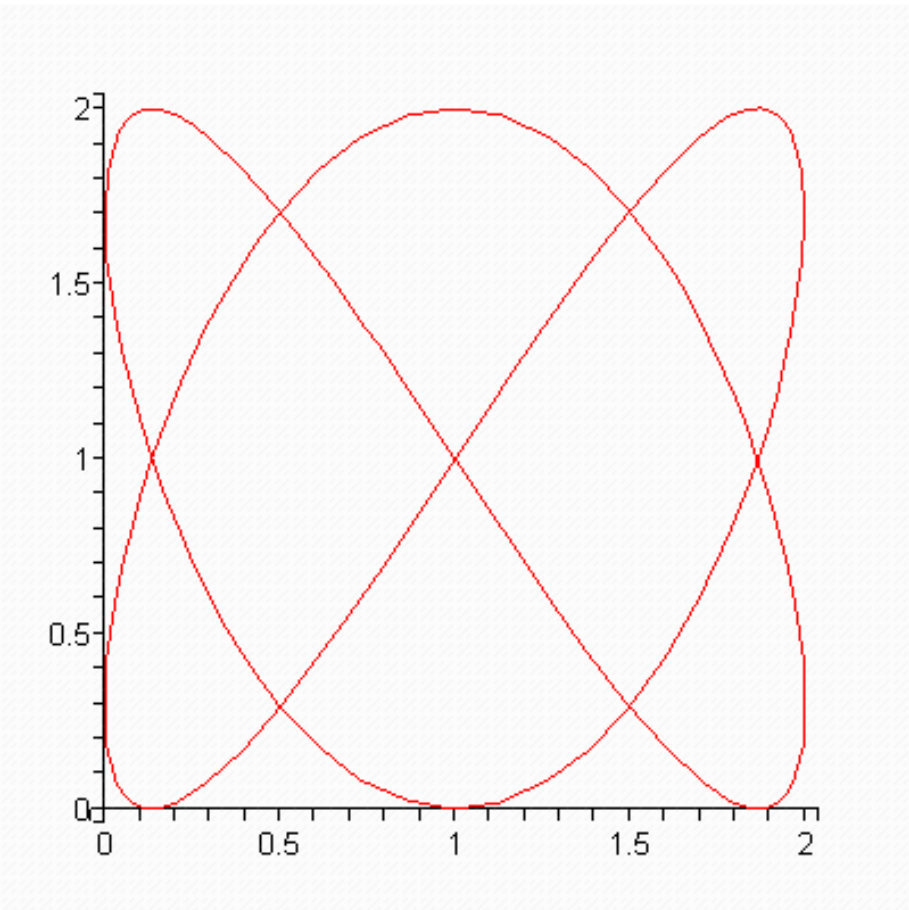
```
> #exo03
> restart;
> with(plots):
Warning, the name changecoords has been redefined
> plot([cos(2*t),sin(2*t),t=0..Pi/2]);
```




```
> plot([cos(t),(1+cos(t))*sin(t),t=0..2*Pi]);
```




```
> plot([sin(2*t)+1,cos(3*t)+1,t=0..2*Pi]);
```



```
> #Exercice 04
> restart;
> with(plots):
Warning, the name changecoords has been redefined
> x0:=1;
```

$$x0 := 1$$

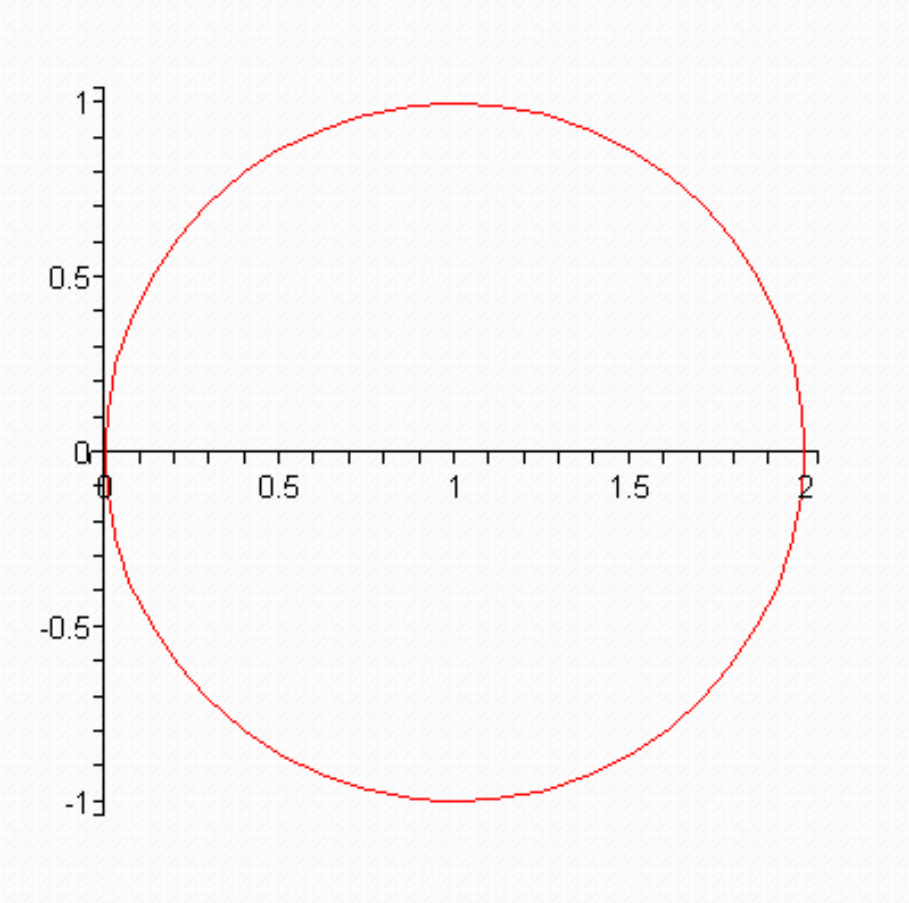
```
> y0:=0;
```

$$y0 := 0$$

```
> r:=2;
```

$$r := 1$$

```
>
plot([r*cos(t)+x0,r*sin(t)+y0,t=0..2*Pi],scaling=constrai
ned);
```




```
> x0:=1;
```

$$x0 := 1$$

```
> y0:=0;
```

$$y0 := 0$$

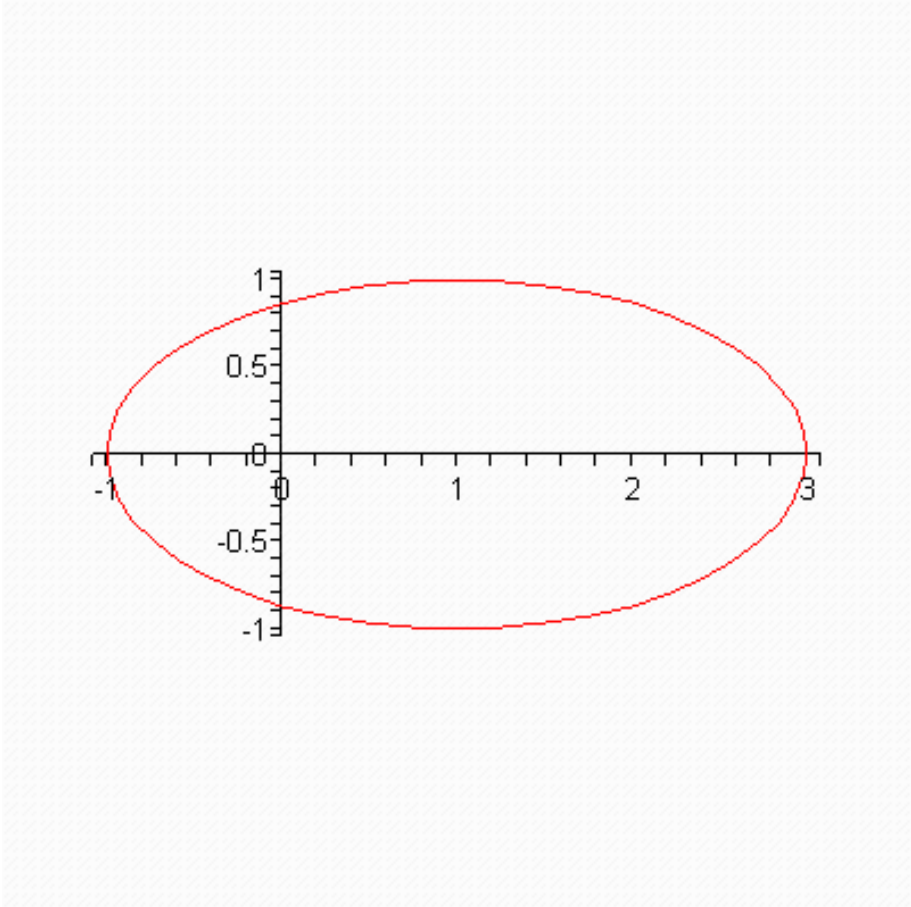
```
> a:=2;
```

$$a := 2$$

```
> b:=1;
```

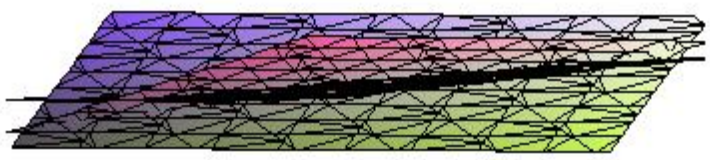
$b := 1$

```
> plot([a*cos(t)+x0,b*sin(t)+y0,t=0..2*Pi],scaling=constrai
ned);
```

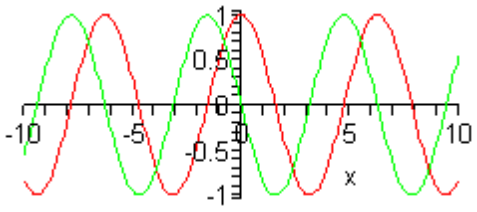



```
> #exo06
> restart;
> with(plots):

> P1:=implicitplot3d(3*x-2*y-z-1,x=-10..10,y=-10..10,z=-10..10):
> P2:=implicitplot3d(2*x-3*y+4*z-3,x=-10..10,y=-10..10,z=-10..10):
> P3:=implicitplot3d(x+y-3*z-2,x=-10..10,y=-10..10,z=-10..10):
> display([P1,P2,P3]);
```



```
> #exo07
>restart;
 > dessin:=proc(f)
 local g;
 g:=diff(f(x),x);
 plot([f(x),g(x)],x);
 end ;
> dessin(cos);
```




```
> #exo07
>restart;
> with(plots):
> f:=(n,x)->x ^(n^ 2/10);
> seq(f(n,x),n=1..10);
> plot([seq(f(n,x),n=1..10)],x=0..3,y=0..2);
>
```