```
> restart:
```

Lemniskata $r^2 = a^2 \cos(2\,t)$

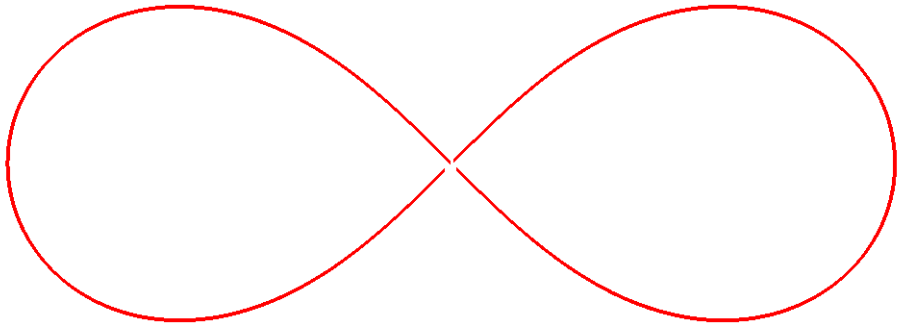
$$r^2 = a^2 \cos(2\,t)$$

Jde o polárně zadanou funkci s pěkným grafem

```
> r:=sqrt(a^2*(cos(2*t)));
```

$$r := \sqrt{a^2 \cos(2\,t)}$$

```
>
> with(plottools):with(plots):
> a:=2:
> plot([r,t,t=0..4*Pi],thickness=4,scaling=constrained,coords=pola
  r,axes=none,numpoints=1000);
```



```
> animate([sqrt(a^2*((cos(2*t*u/10)))),t*u/10,t=0..2*Pi],u=0..10,t
  hickness=4,scaling=constrained,coords=polar,axes=none,numpoints=
  1000);
```

```
> sign(-1);
```

-1

```
> plotsetup(ps,plotoutput=`aaaaaaaaaaa.ps`,plotoptions=`noborder,
  axisheight=10cm, axiswidth=10cm,portrait,color`);
> bbb:=implicitplot3d( x^3 + y^3 + z^3 = 1,x=0..1,y=0..1,
  z=0..1,grid=[13,13,13], axes=boxed):

> aaa := plot({0, x^x},x = 0 .. 1):
> ccc:=plot3d({2-x-y}, x=0..1, y=0..1, axes=boxed,color=blue):
> display(aaa);
> plot([t,t,t=0..4*Pi],coords=polar);
>
```