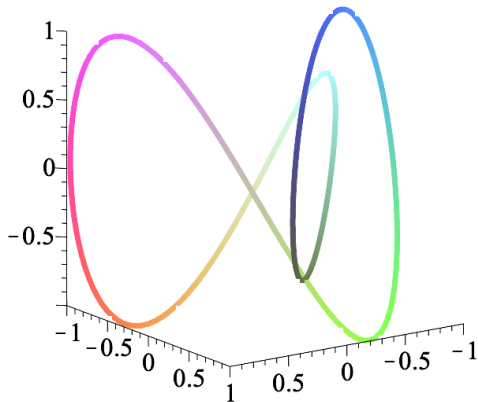


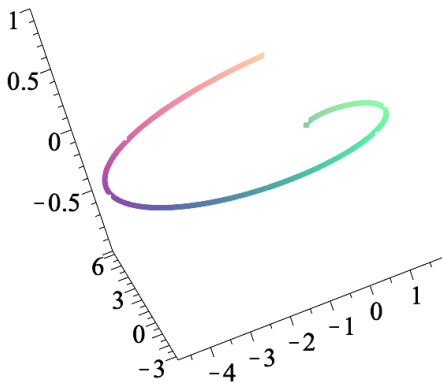
## 3D Lissajous curve

```
x:=sin(t);  
y:=sin(2*t+1);  
z:=sin(3*t+1);
```



# Archimedes spiral

```
x:=t*cos(t);  
y:=t*sin(t);  
z:=0;
```

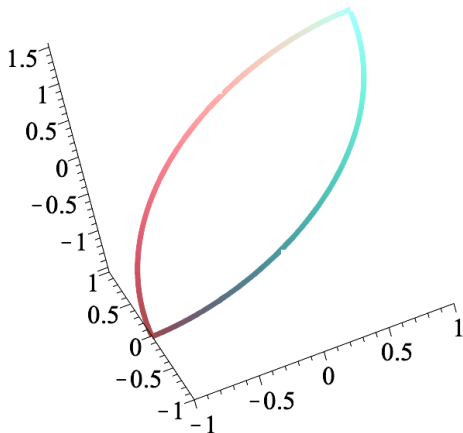


## billiard knot or Turk's head knot

```
x:=cos(t);
```

```
y:=sin(t);
```

```
z:=arcsin(sin(t));
```

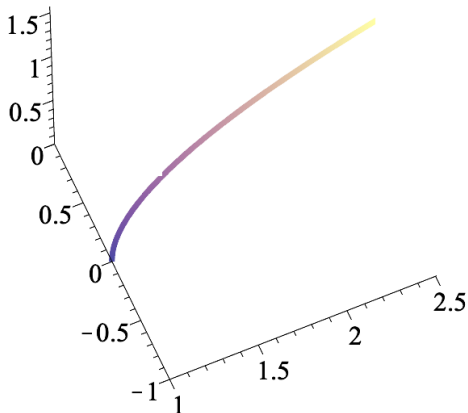


## catenary with new domain from 0 to $\frac{\pi}{2}$

$$x := t;$$

$$y := \cosh(t);$$

$$z := 0;$$

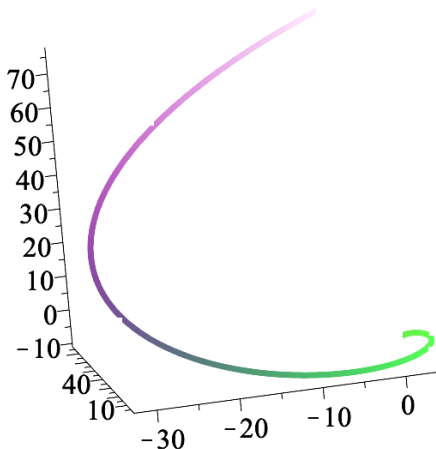


## concho-spiral or conchospiral

$$x:=2^t \cos(t);$$

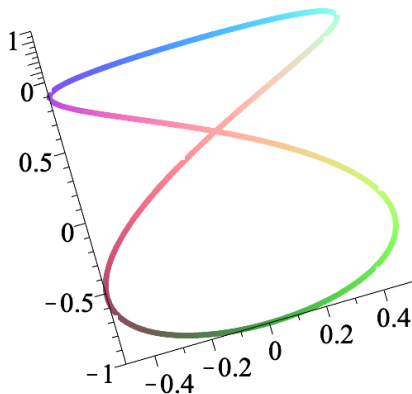
$$y:=2^t \sin(t);$$

$$z:=2^t;$$



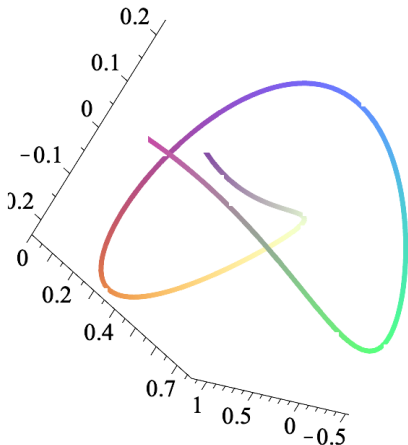
## constant precession curve (an example of a Clelia curve)

```
x:=cos(t)^2;  
y:=sin(t)*cos(t);  
z:=sin(t);
```



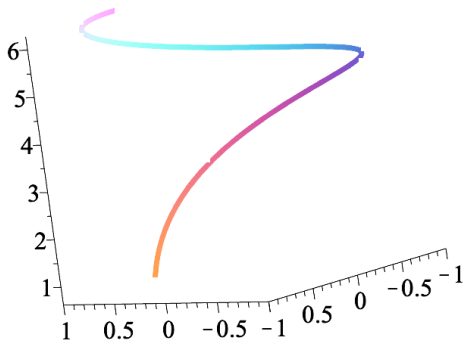
## figure eight knot

```
x:=sin(t)+t/10;  
y:=sin(t)*cos(t/2);  
z:=sin(2*t)*sin(t/2)/4;
```



## geodesic circle on a cylinder

```
x:=cos(t);  
y:=sin(t);  
z:=sqrt(4*Pi^2-t^2);
```



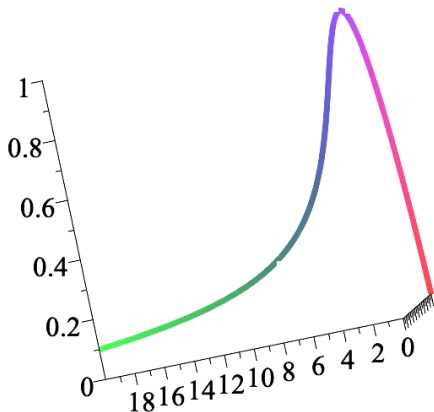


## horopter curve with new domain from 0 to $\pi - .1$

`x:=1+cos(t);`

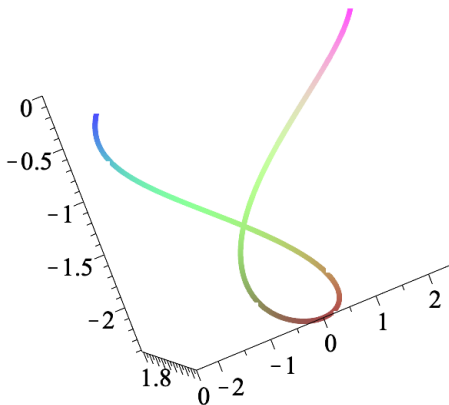
`y:=tan(t/2);`

`z:=sin(t);`



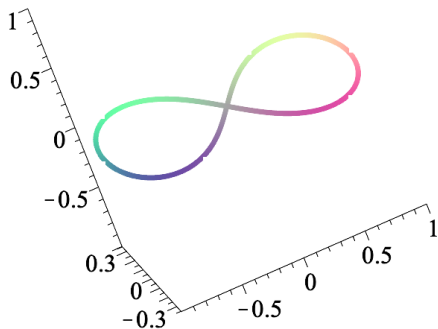
## Klein bottle curve

```
x:=cos(t)*cos(t/2)*(\sqrt(2)+1);  
y:=sin(t)*cos(t/2)*(\sqrt(2)+1);  
z:=-sin(t/2)*(\sqrt(2)+1);
```



## lemniscate of Bernoulli

```
x:=cos(t)/(1+sin(t)^2);  
y:=sin(t)*cos(t)/(1+sin(t)^2);  
z:=0;
```

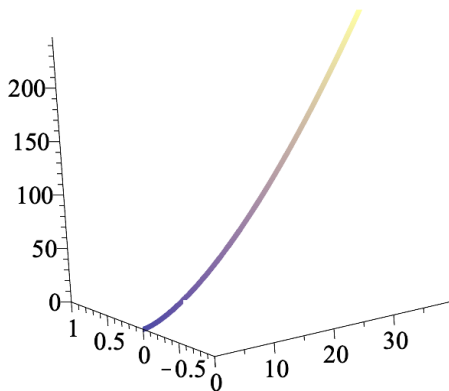


## Neile's semicubical parabola

$$x := t^2;$$

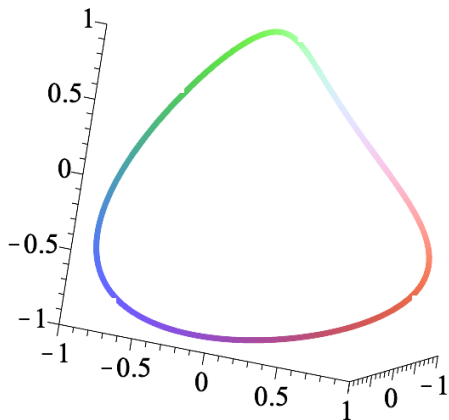
$$y := t^3;$$

$$z := 0;$$



## pancake curve

```
x:=cos(t);  
y:=sin(t);  
z:=sin(2*t);
```

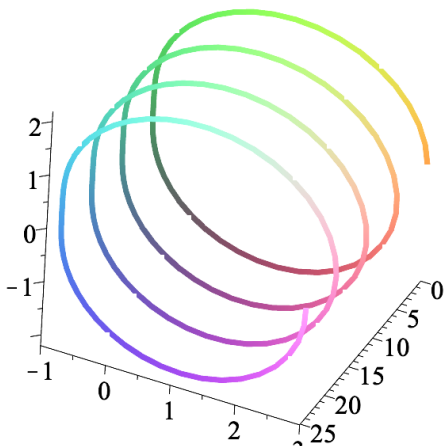


## Slinky curve with new domain from 0 to $8\pi$

```
x := (2 + cos(t)) * cos(t);
```

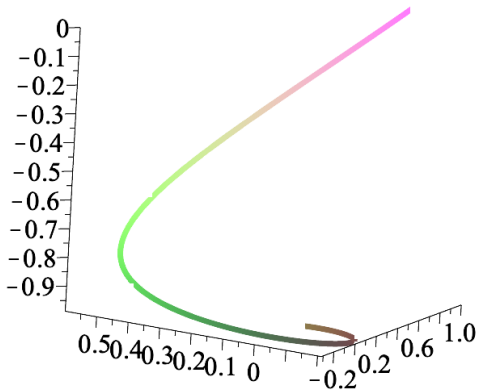
```
y := (2 + cos(t)) * sin(t);
```

```
z := t + sin(t);
```



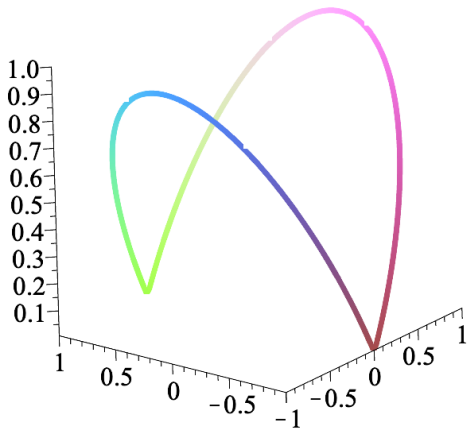
## spherical spiral, loxodrome, or rhumb line

```
x:=cos(t)*cos(arctan(t));  
y:=sin(t)*cos(arctan(t));  
z:=-sin(arctan(t));
```



## Steinmetz curve

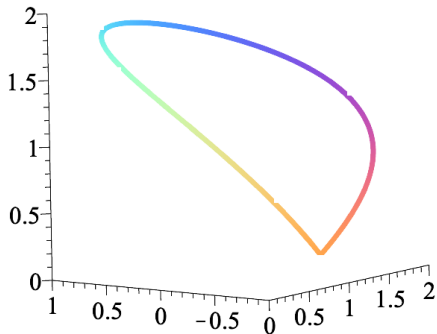
```
x:=cos(t);  
y:=sin(t);  
z:=sqrt(1-sin(t)^2);
```





## Viviani's curve

```
x:=1+cos(t);  
y:=sin(t);  
z:=2*sin(t/2);
```



# witch of Agnesi

```
x:=2*t;  
y:=2/(1+t^2);  
z:=0;
```

