

## Basic shapes

In the following example we'll illustrate MatDeck's functions used to generate basic shapes which are used in digital signal processing.

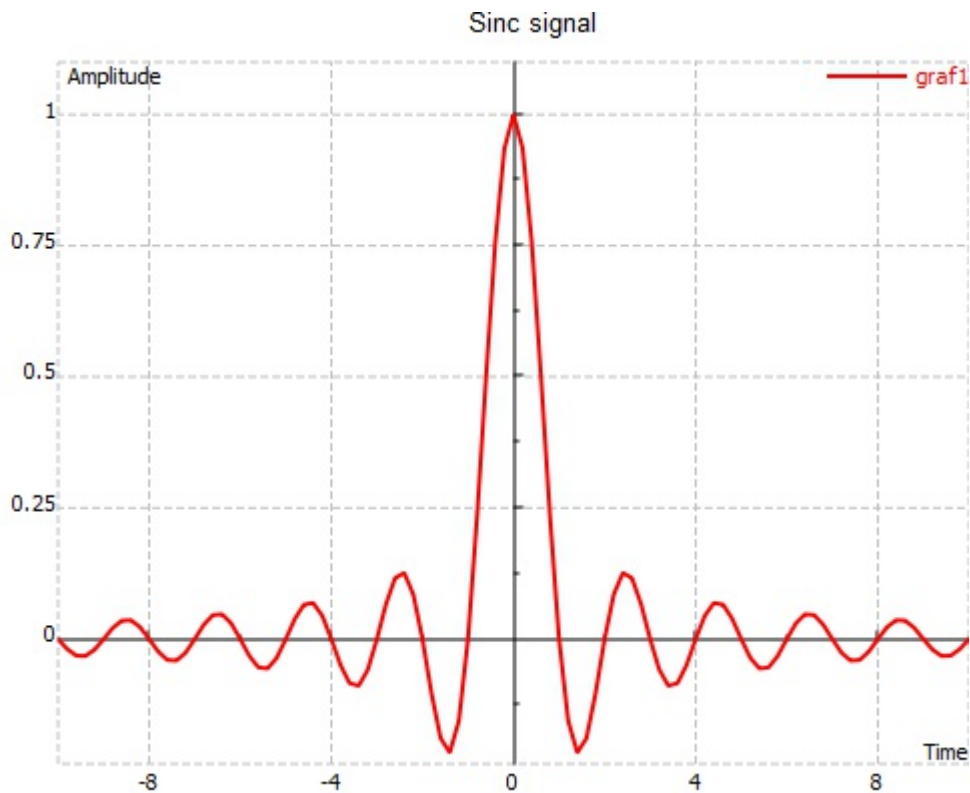
```
Dt:=curve2d(x,-10,10,101) Time axis generated
```

```
dt:=col2vec(Dt,0)
```

### Sinc function

```
y:=sinc(dt) Sinc function calculated
```

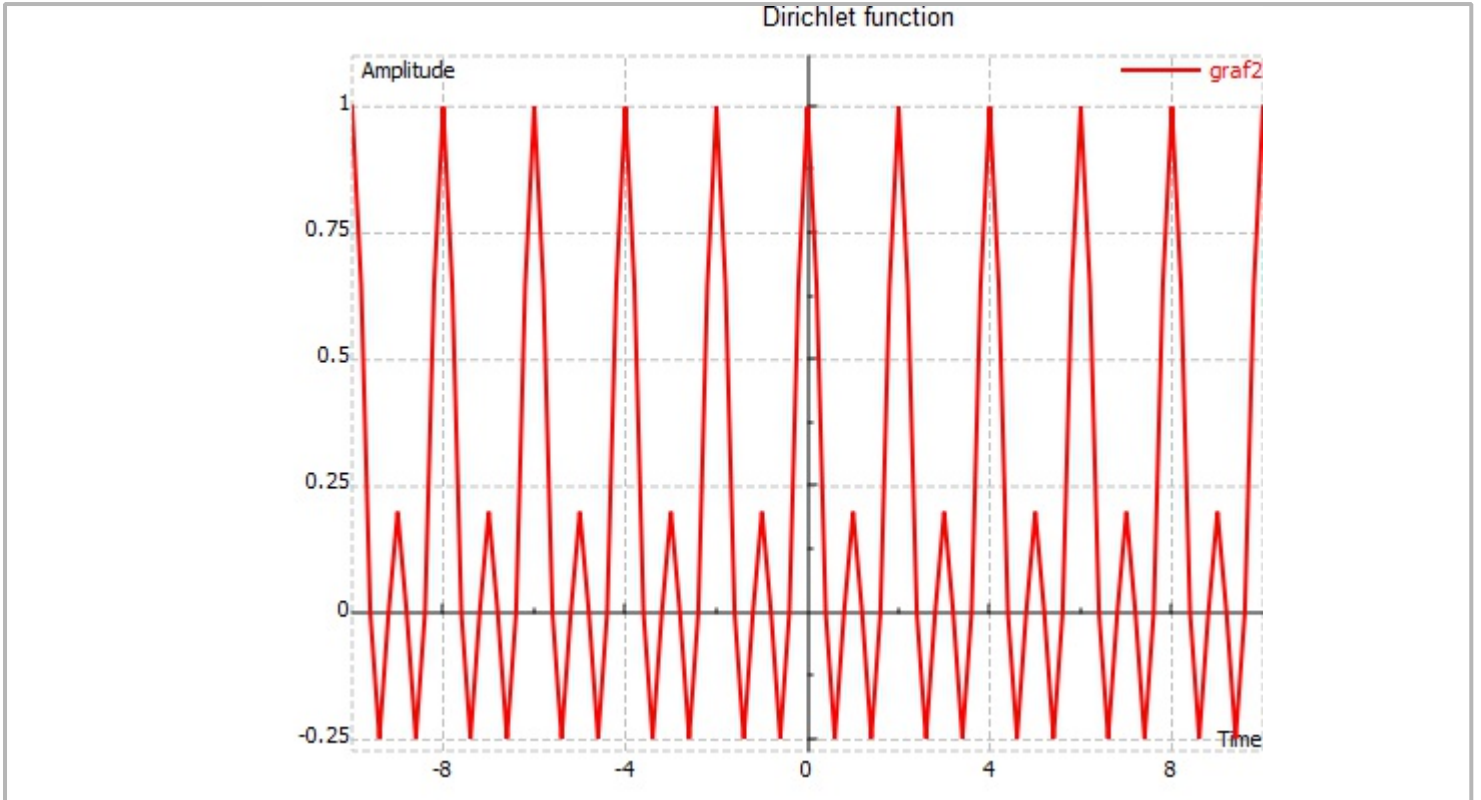
```
graf1:=join mat cols(dt,y) Graph of the sinc signal
```



### Dirichlet function

```
y11:=diric(dt,5) Dirichlet function calculated
```

```
graf2:=join mat cols(dt,y11) Graph of the Dirichlet function
```



## Square signal

`y2 := square(dt)` Square signal calculated

`graf3 := join mat cols(dt , y2)` Graph of the square signal

