TECHNIKI PROGRAMOWANIA - projekt 3

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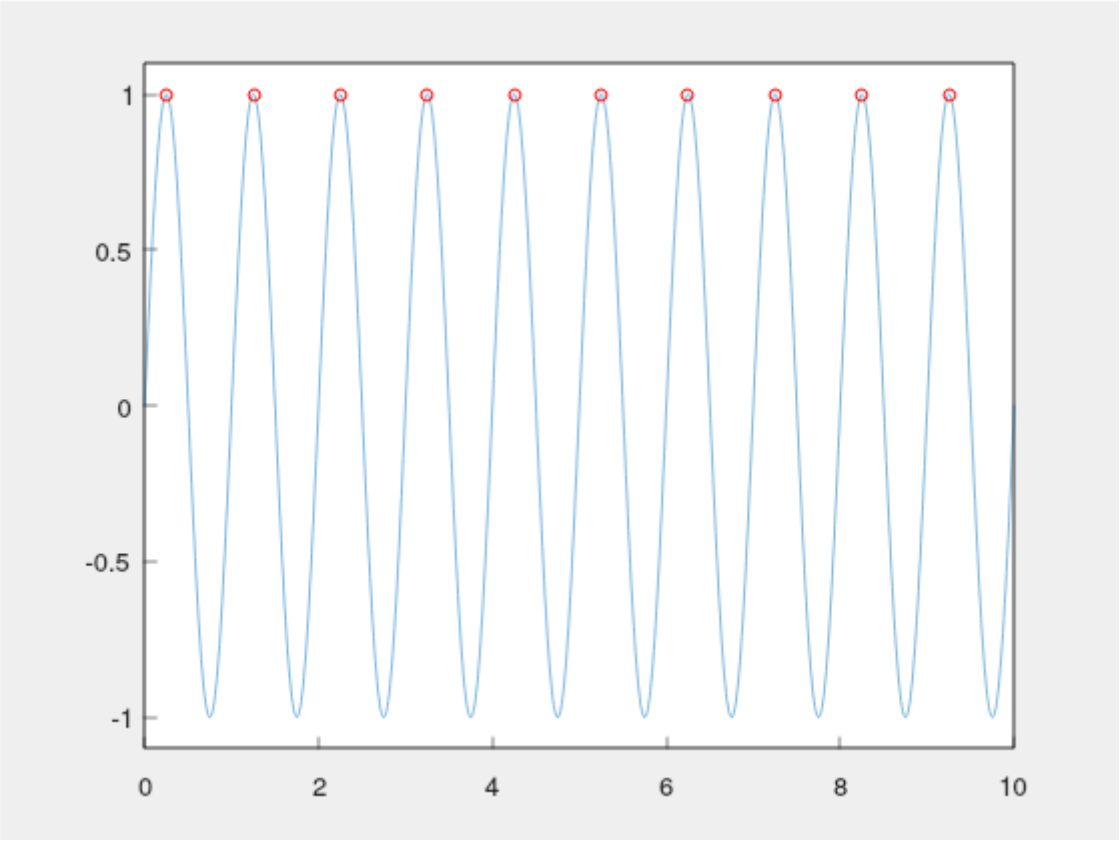
Wizualizacja wykresów 1D

```
>>> import tp3
>>> sin = tp3.sinwave(1,0,10,1000)
>>> sin.show()
```

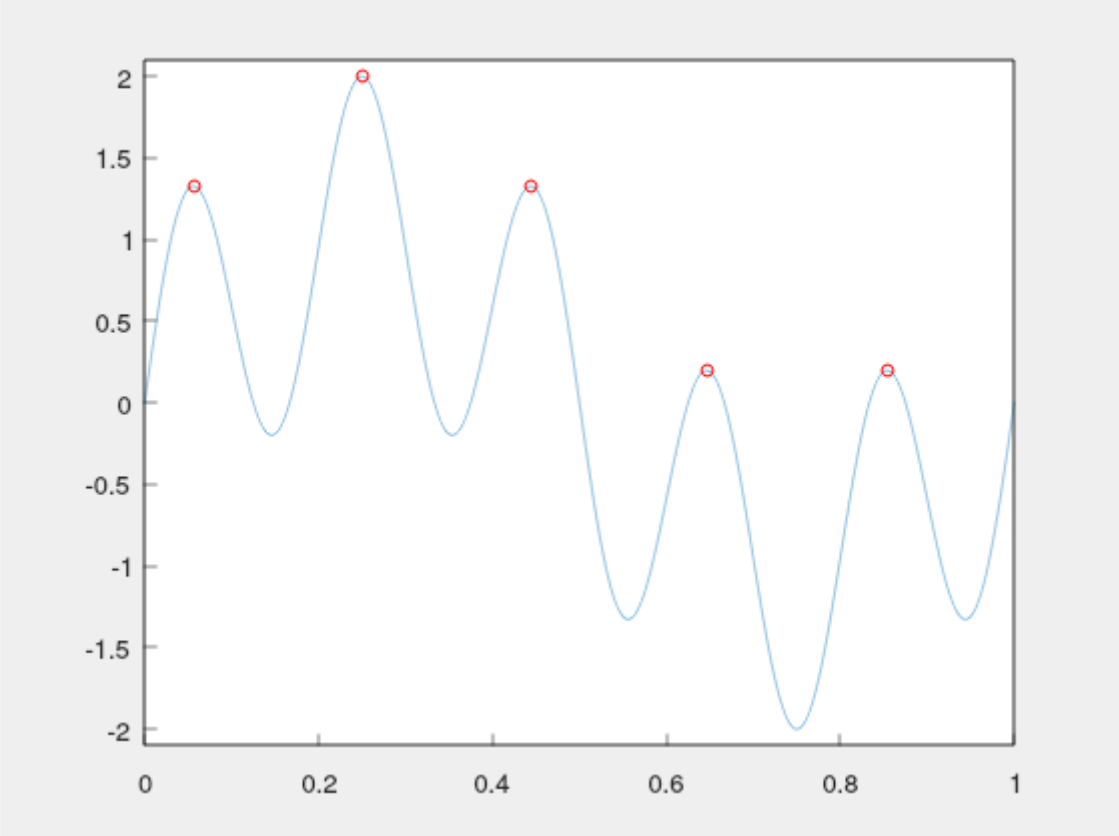
Frequency = 1Hz
Start = 0s
End = 10s
Sampling = 1000/s



Dodawanie

```
>>> freqA = 1
>>> freqB = 5
>>> sinA = tp3.sinwave(freqA,start,stop,sample)
>>> sinB = tp3.sinwave(freqB,start,stop,sample)
>>> sinC = tp3.sinwave
>>> sinC = sinA + sinB
>>> sinC.plot()
```

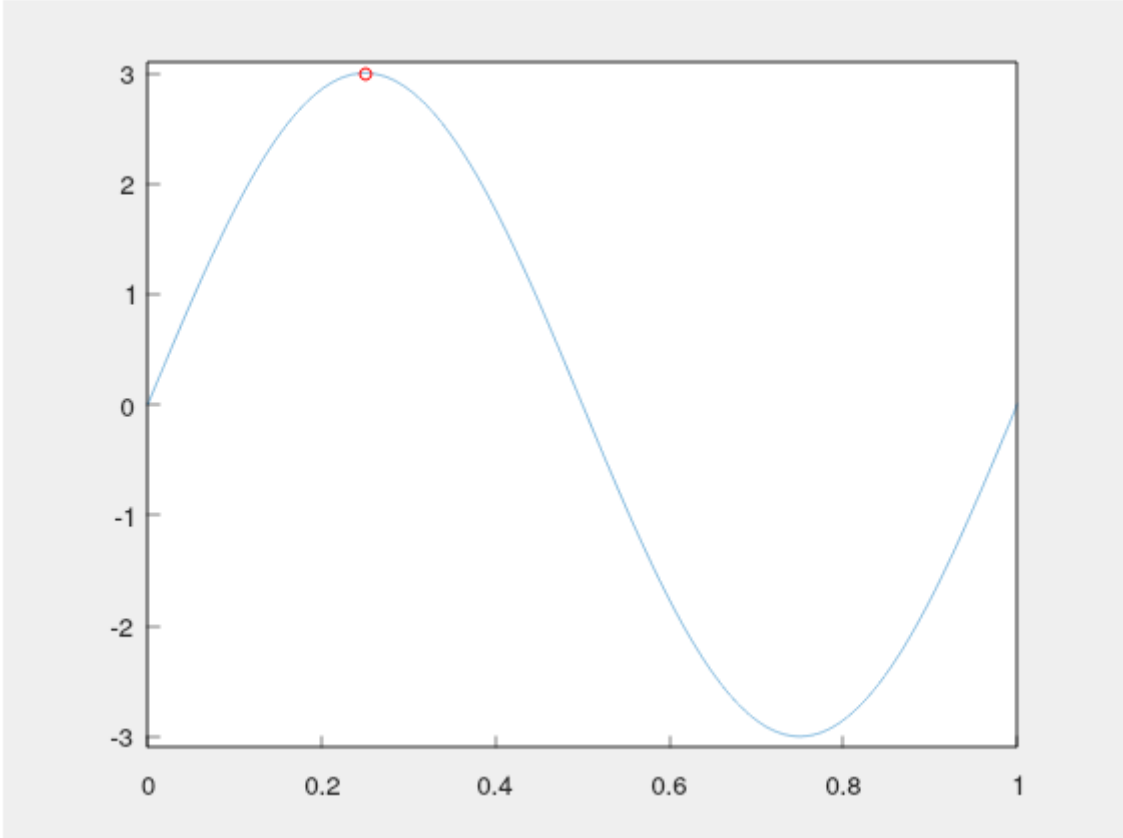
Start = 0s
Stop = 1s
Sample = 10000/s



Analogicznie odejmowanie

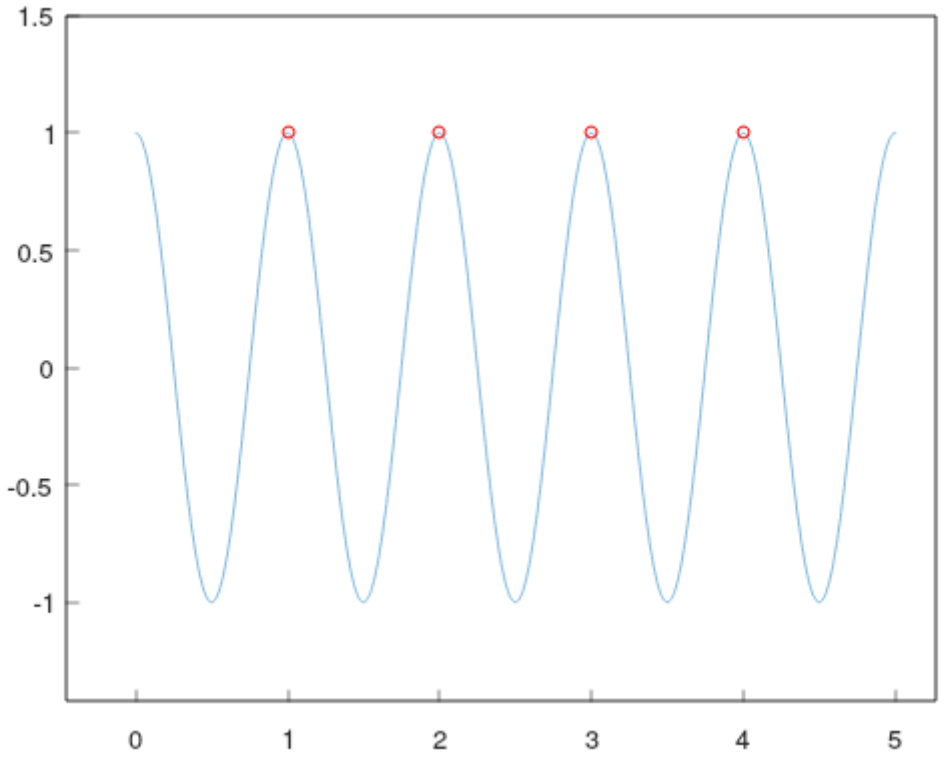
Mnożenie

```
>>> sinA = tp3.sinwave(1,0,1,1000)
>>> sinA = sinA *3
>>> sinA.show()
```

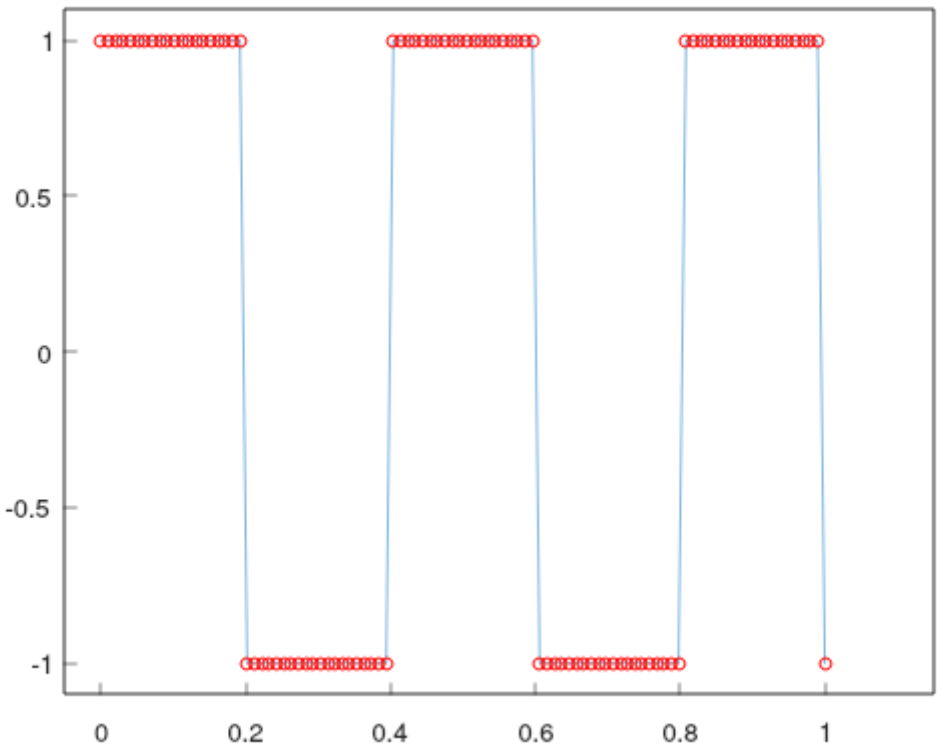


Cos, Square Wave and Sawtooth

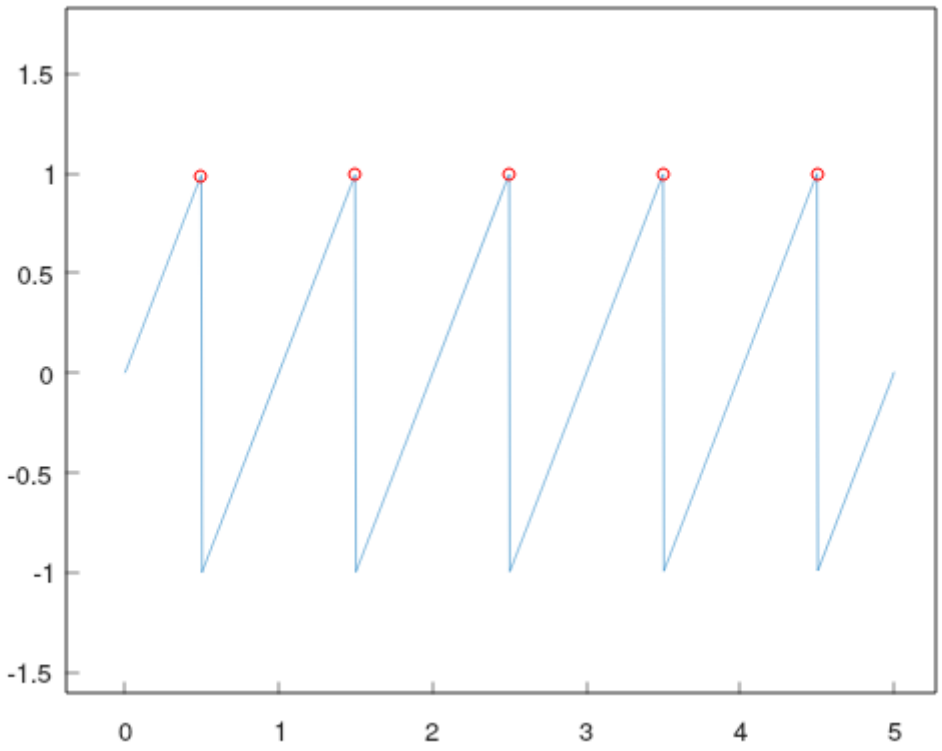
>>> cos = tp3.coswave(1,0,5,1000)



>>> squ = tp3.squarewave(5,0,1,100)

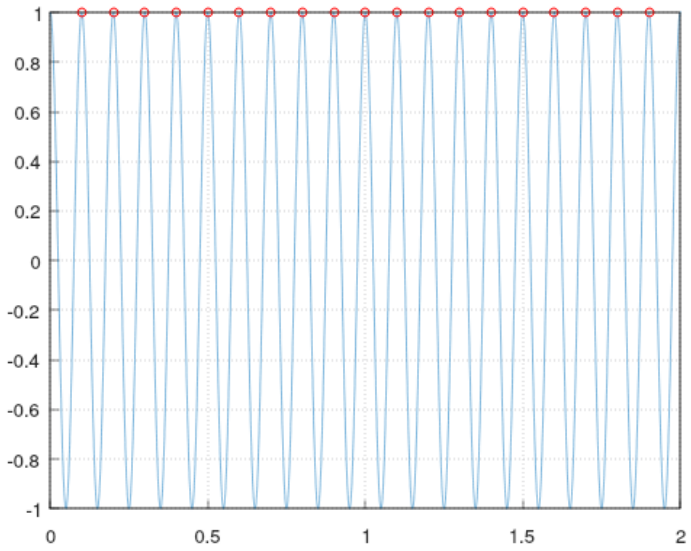


```
>>> saw = tp3.sawtoothwave(1,0,5,1000)
```

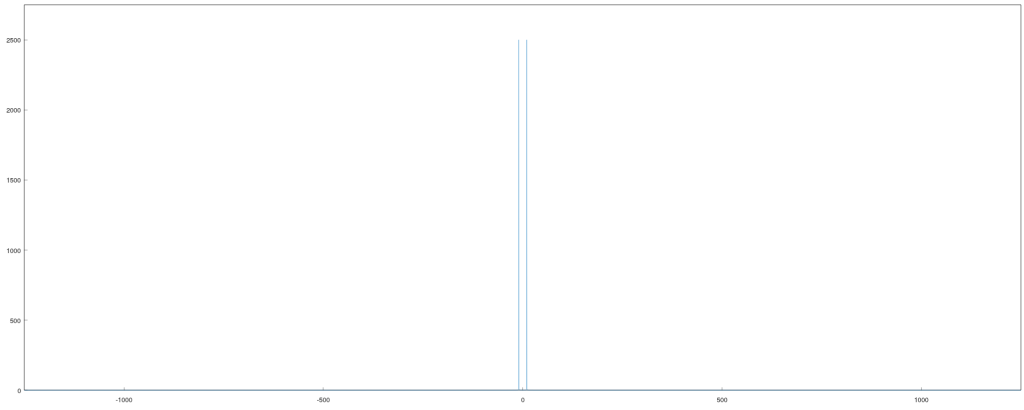


DTF

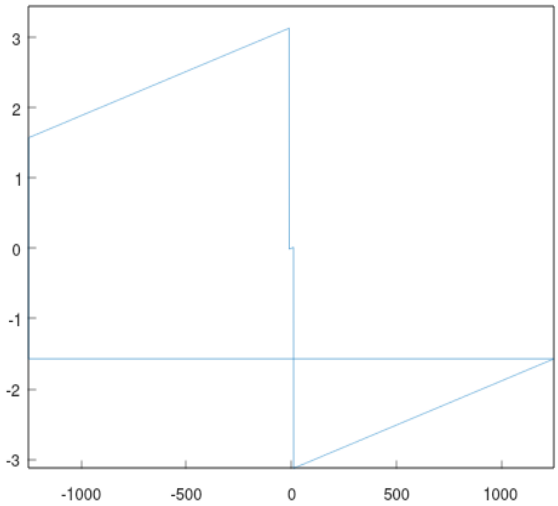
>>> cos = tp3.coswave(10,0,2,5000)



>>> cos = cos.dft()
>>> cos.show_magnitude()



>>> cos.show_phase()



```
>>> cos = cos.dft()
>>> cos = cos.invert()
>>> cos.show()
```