

## EdM, S. 150, Nr. 5

01. Januar 2012, 07:36

```
(%i1) f(t) := 1 * %e^(-t/1000) * sin(0.44 * %pi * t + 0.5*%pi);
      - t
      ----
(%o3)  f(t) := 1 %e      sin(0.44 %pi t + 0.5 %pi)
      1000

(%i6) draw2d(explicit(_f_,t,0,1000),xaxis = true,yaxis = true,grid = true)$

(%i13) Statt "find_root( 0.05 = %e^(-t/1000) * sin(0.44 * %pi * t + 0.5*%pi) ,t,1000,100000);"

berechne (Warum?)

(%i18) solve(0.05 = %e^(-x/1000),x);

(%o18) [x = 1000 log(20)]

(%i19) ev(% ,numer);
(%o19) [x = 2995.732273553991]
```

