

PME3380 – Modelagem de Sistemas Dinâmicos

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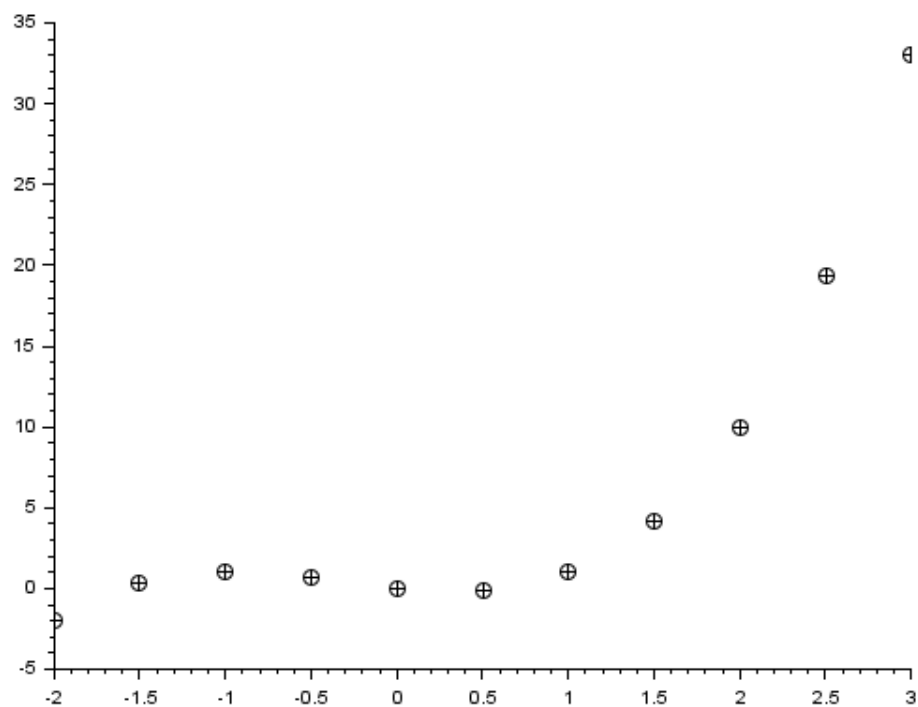
NUSP: 10772842

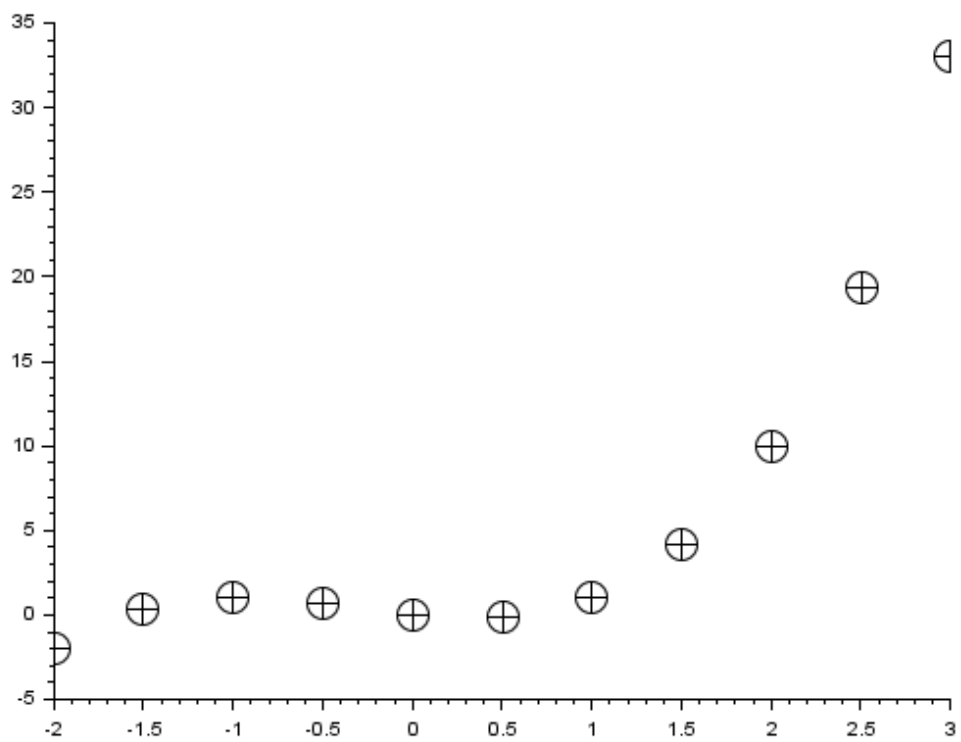
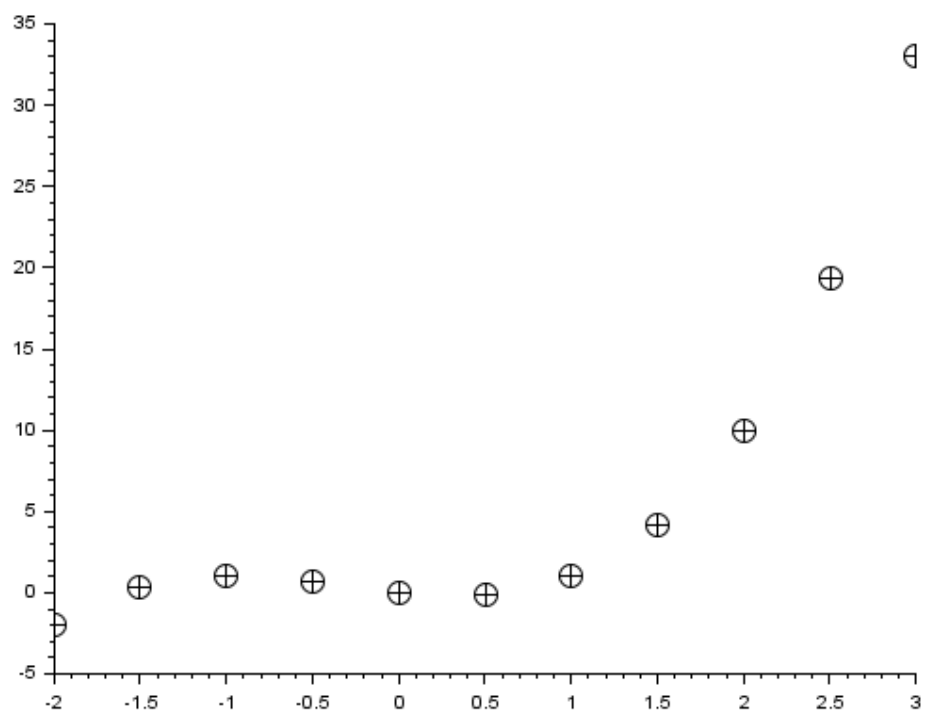
Executando o arquivo “teste.sci”, obtém-se o seguinte resultado:

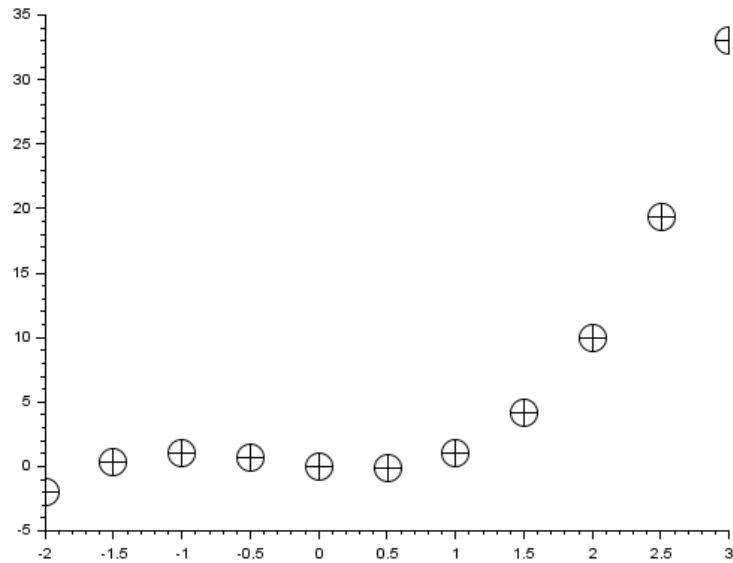
```
--> teste(0.5*pi)
ans =

    3.6078962
```

Para a segunda parte, executou-se o arquivo “teste.sce” e obteve-se os seguintes gráficos:







Código “teste.sci”:

```
function [y]=teste(x)
y=x+x^2+sin(x*2*%pi);
endfunction
```

Código “teste.sce”

```
deff([y]=test0(x),'y=x+x^2+sin(x*2*%pi)')
deff([y]=test1(x),'y=-x+x^2+x^3')
deff([y]=test2(x),'y=sqrt(x)')
x=-2:0.5:3;
a=1;
b=0;
t1=(a==1);
t2=(b>0.5);
if and([t1 t2]) then
y=test0(x);
elseif or([t1 t2]) then
y=test1(x);
else
y=test2(x);
end,
plot2d(x,y,-3)
set("current_figure",1)
xset('mark size', 2)
plot2d(x,y,-3)
set("current_figure",2)
xset('mark size', 4)
plot2d(x,y,-3)
set("current_figure",3)
xset('mark size', 5)
plot2d(x,y,-3)
```