

Escola Politécnica da Universidade de São Paulo

PME 3380 – Modelagem de Sistemas Dinâmicos

## Lista A



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# 1. TAREFA

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Tarefa solicitada no programa scilab

## 1.1 PRIMEIRO TESTE – TESTE.SCI

### 1.1.1 Código

```
1 function [y]=teste(x)
2 y=x+x^2+sin(x^2*pi);
3 endfunction
4
```

### 1.1.2 Saída

Usando  $\pi/2$ , obtém-se:

```
--> exec('C:\Users\lucas\OneDrive\Documentos\modelagensistdin\teste1.sci', -1)

--> teste(0.5*pi)
ans =

    3.6078962
```

## 1.2 SEGUNDO TESTE – TESTE.SCE

### 1.2.1 Código

```
1 deff(' [y]=test0(x) ', 'y=x+x^2+sin(x^2*pi)')
2 deff(' [y]=test1(x) ', 'y=-x+x^2+x^3')
3 deff(' [y]=test2(x) ', 'y=sqrt(x)')
4 x=-2:0.5:3;
5 a=1;
6 b=0;
7 t1=(a==1);
8 t2=(b>0.5);
9 if and([t1 t2]) then
10 y=test0(x);
11 elseif or([t1 t2]) then
12 y=test1(x);
13 else
14 y=test2(x);
15 end,
16 plot2d(x,y,-3)
17 set("current_figure",1)
18 xset('mark-size',-2)
19 plot2d(x,y,-3)
20 set("current_figure",2)
21 xset('mark-size',-4)
22 plot2d(x,y,-3)
23 set("current_figure",3)
24 xset('mark-size',-5)
25 plot2d(x,y,-3)
```

## 1.2.2 Saídas Gráficas

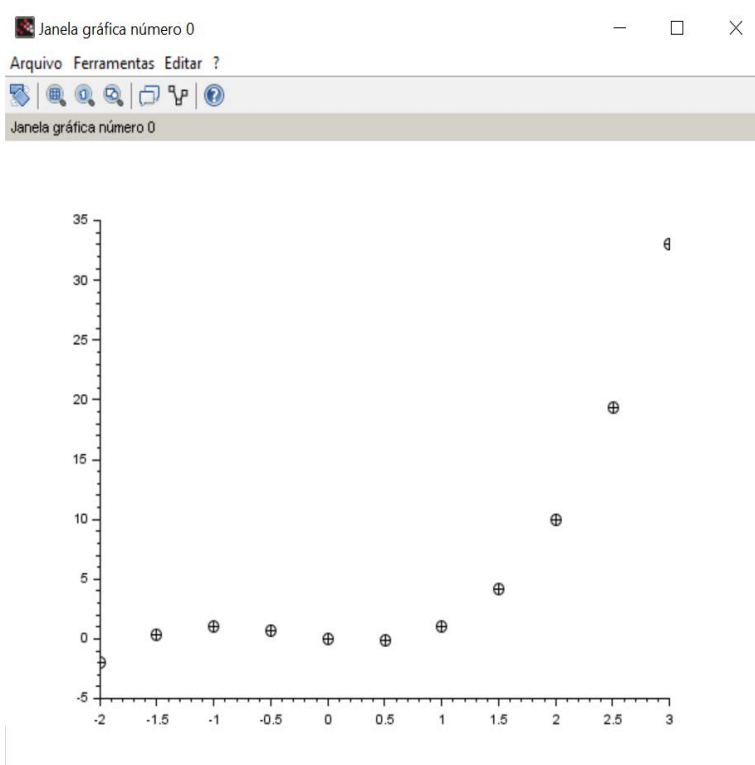


Figura 1 - Janela 0

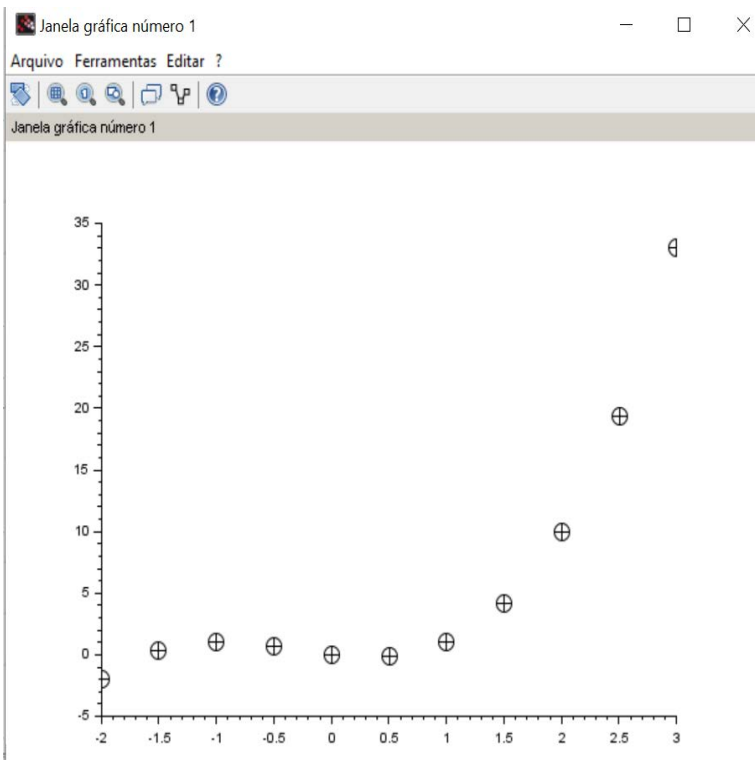
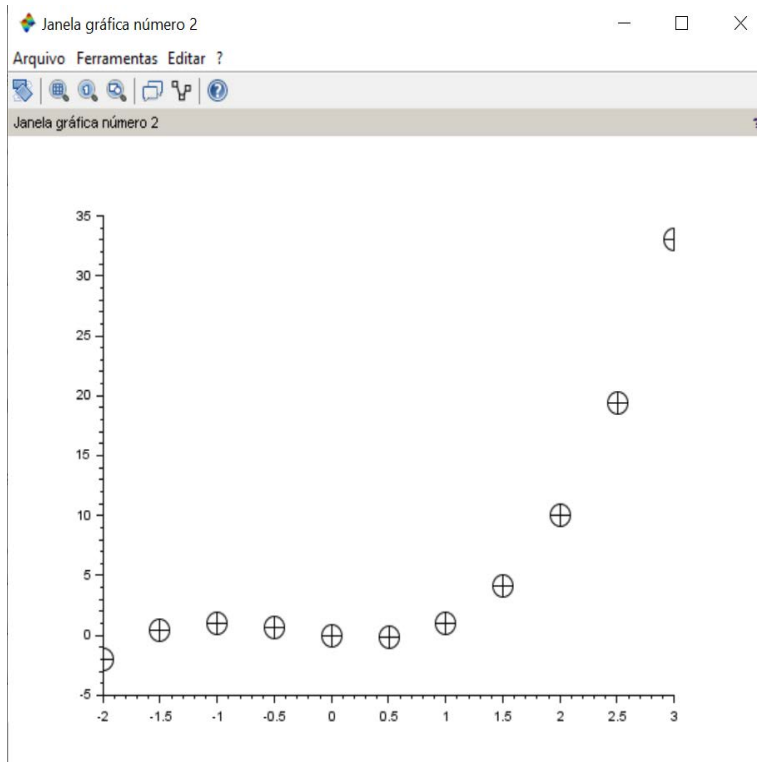
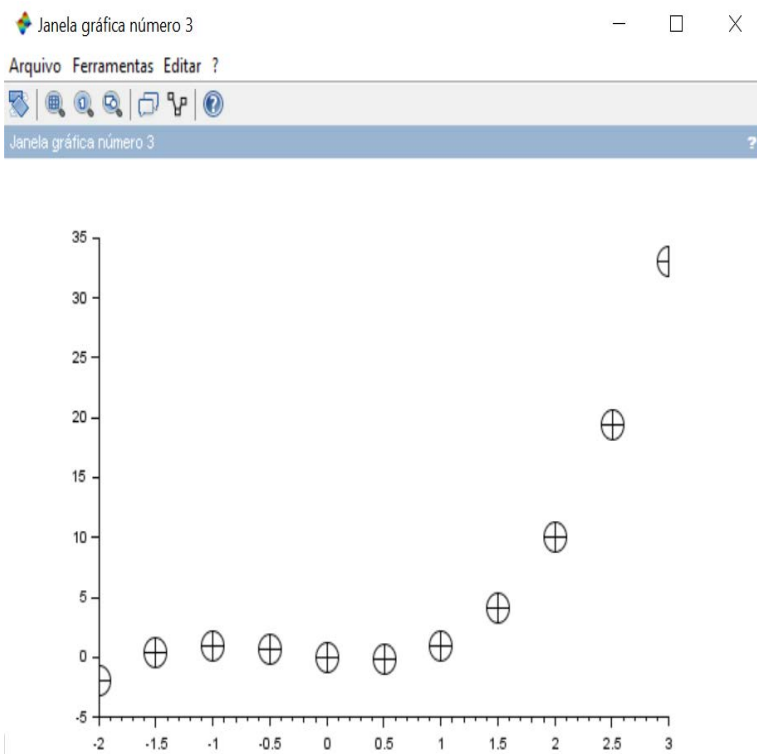


Figura 2 - Janela 1



**Figura 3 - Janela 2**



**Figura 4 - Janela 3**