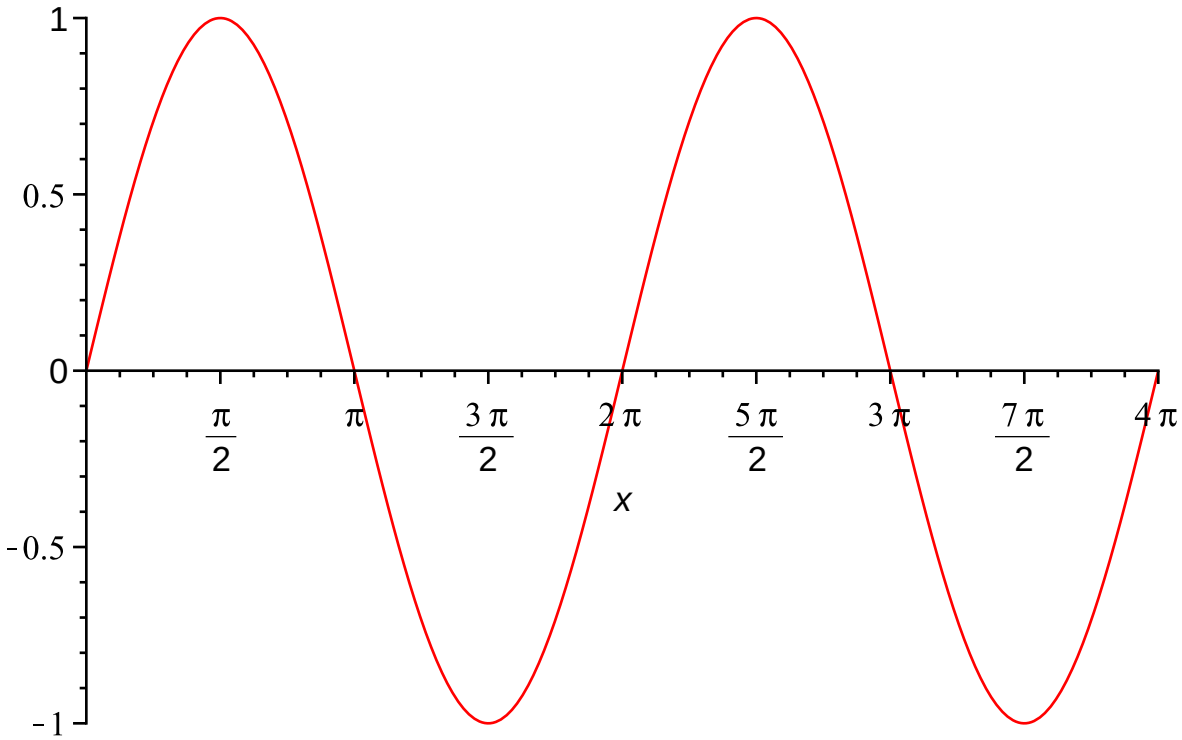
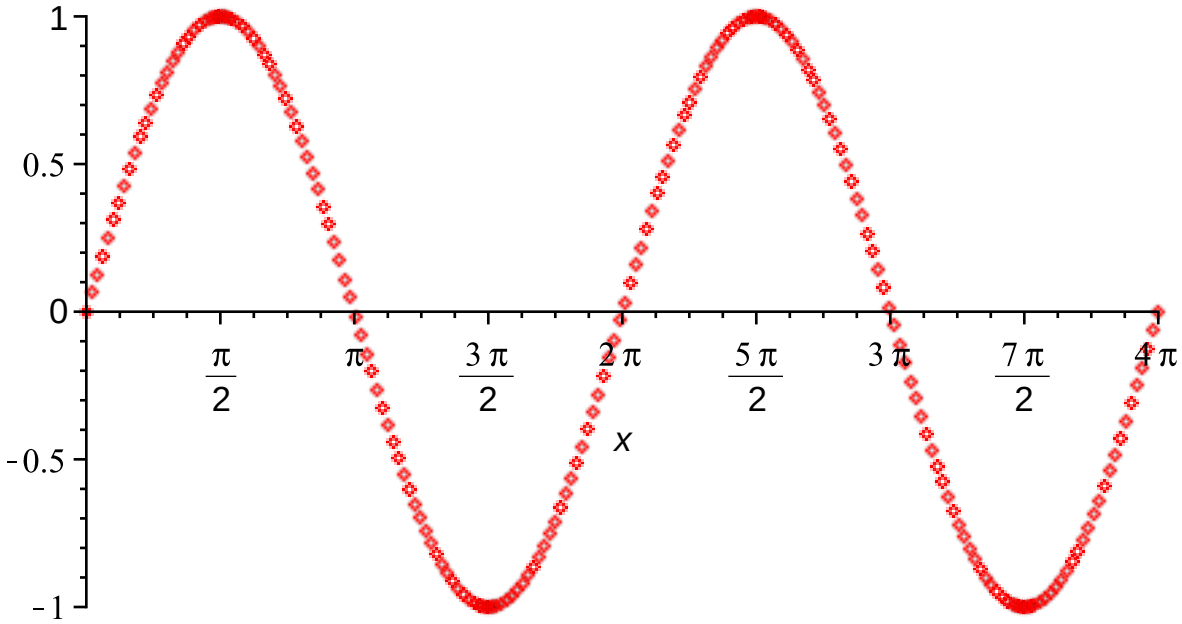
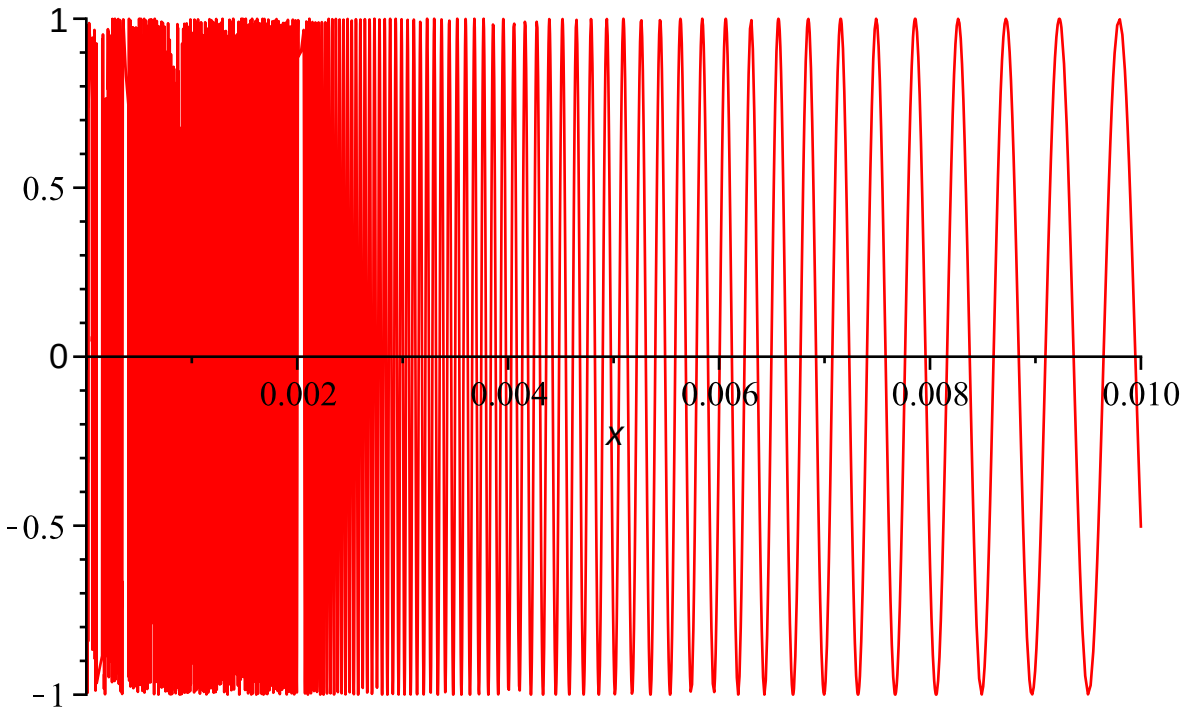
```
> plot(sin(x),x=0..4*Pi);
```



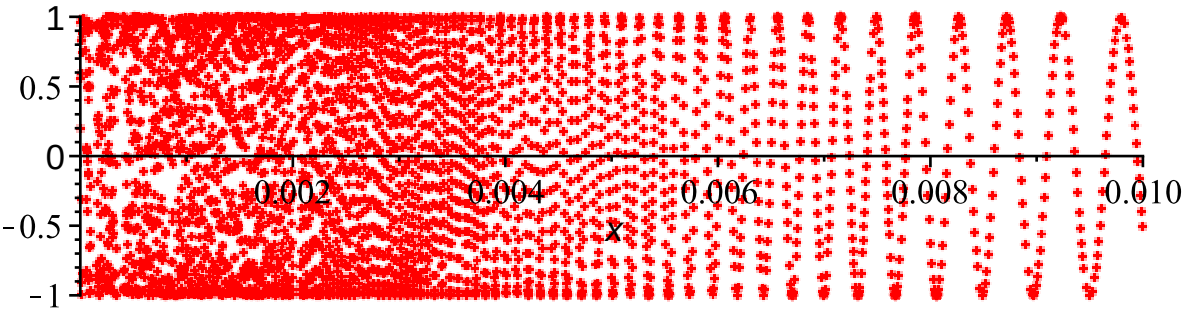

```
> plot(sin(x),x=0..4*Pi,style=point);
```



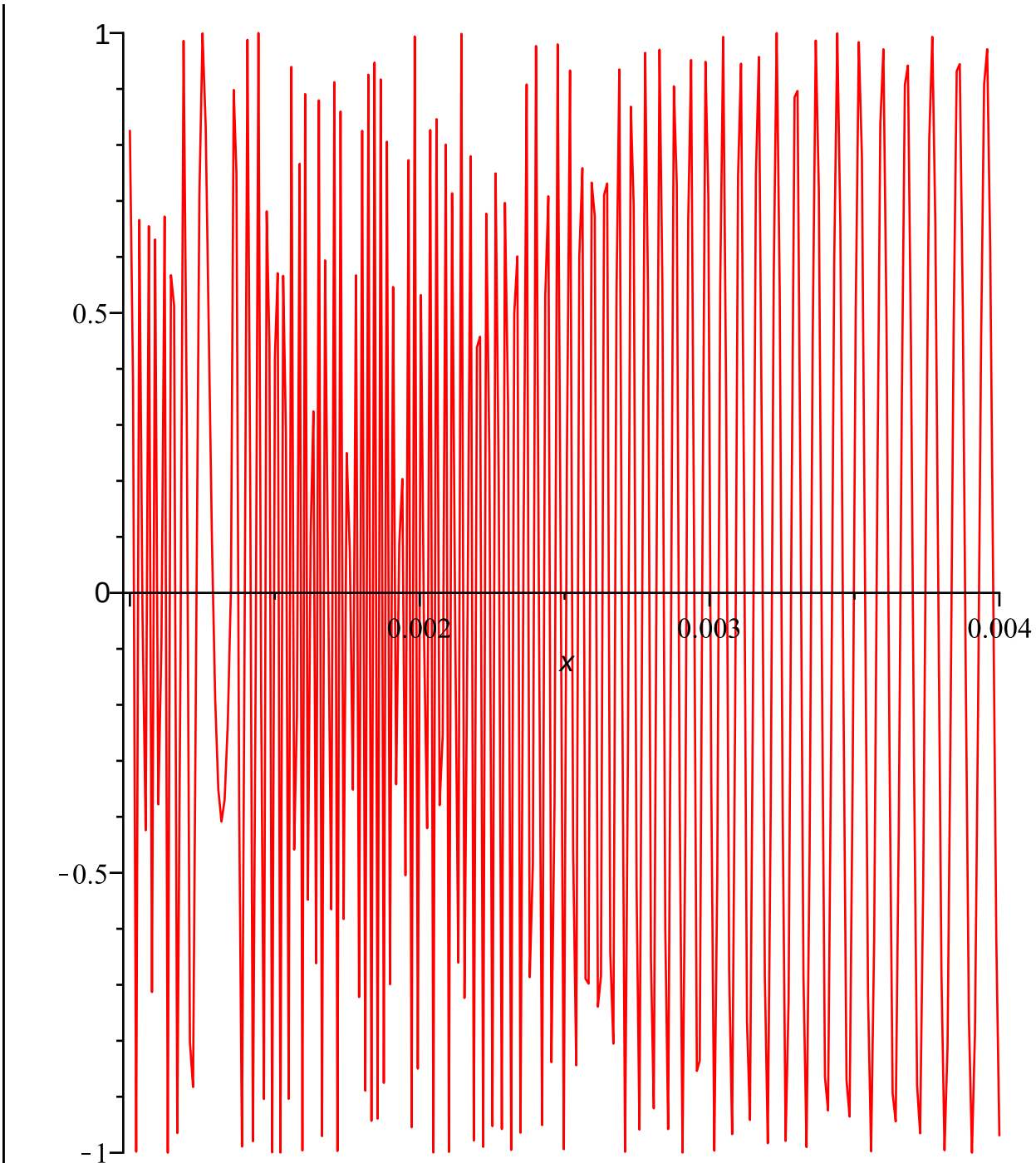

```
> plot(sin(1/x),x=0..0.01);
```



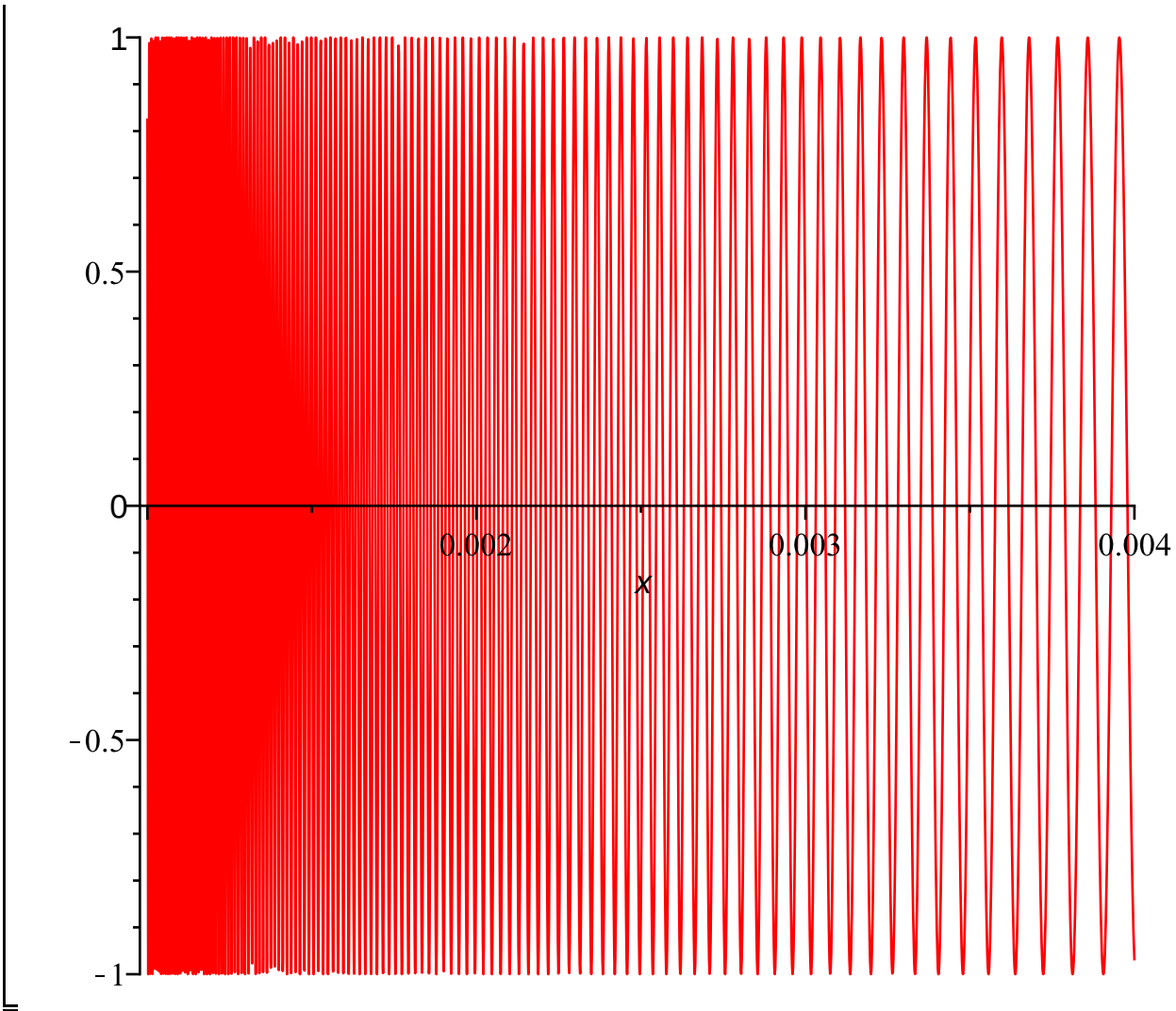

```
> plot(sin(1/x),x=0..0.01,style=point);
```



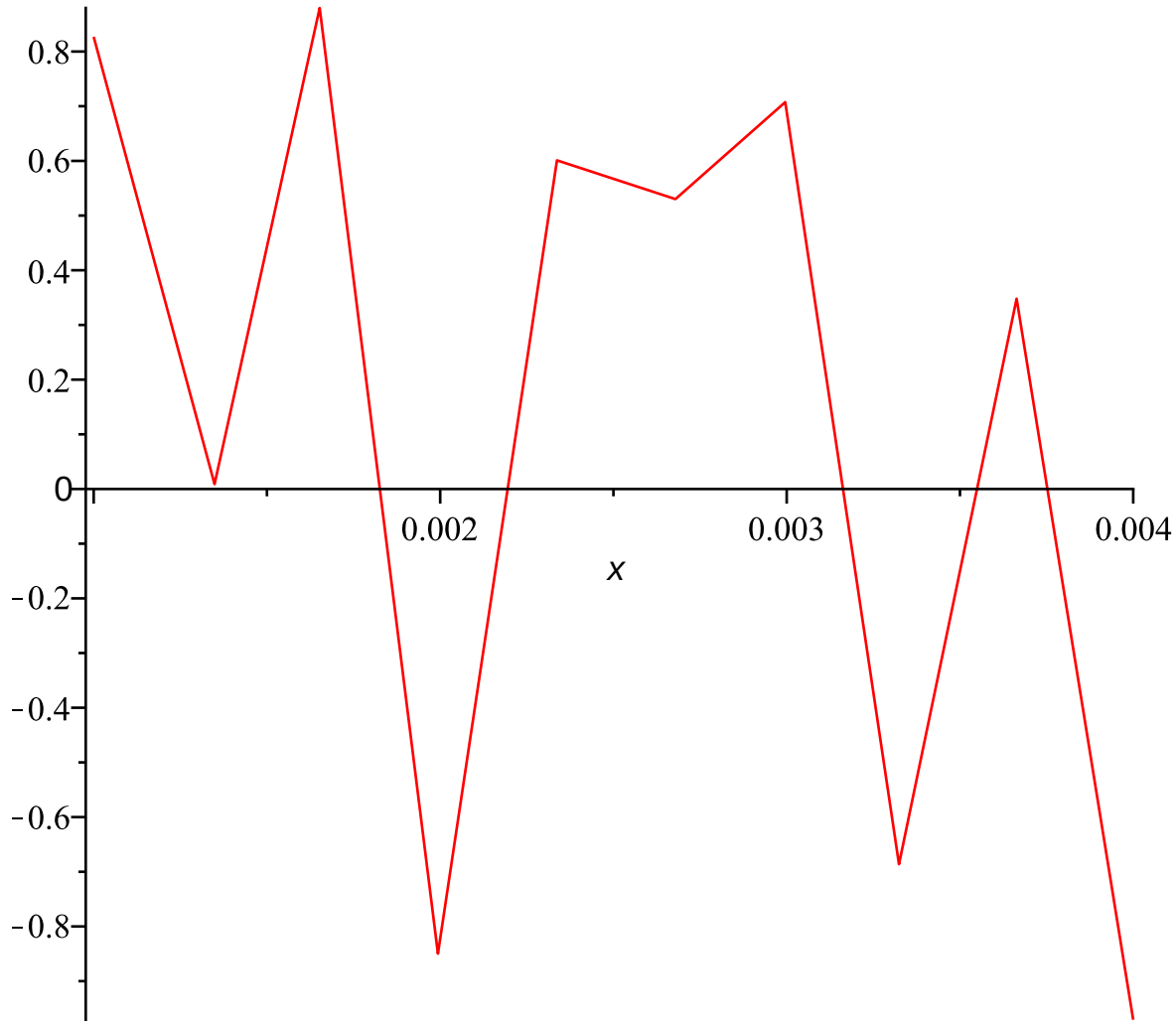

```
> plot(sin(1/x),x=0.001..0.004,numpoints=10);
```



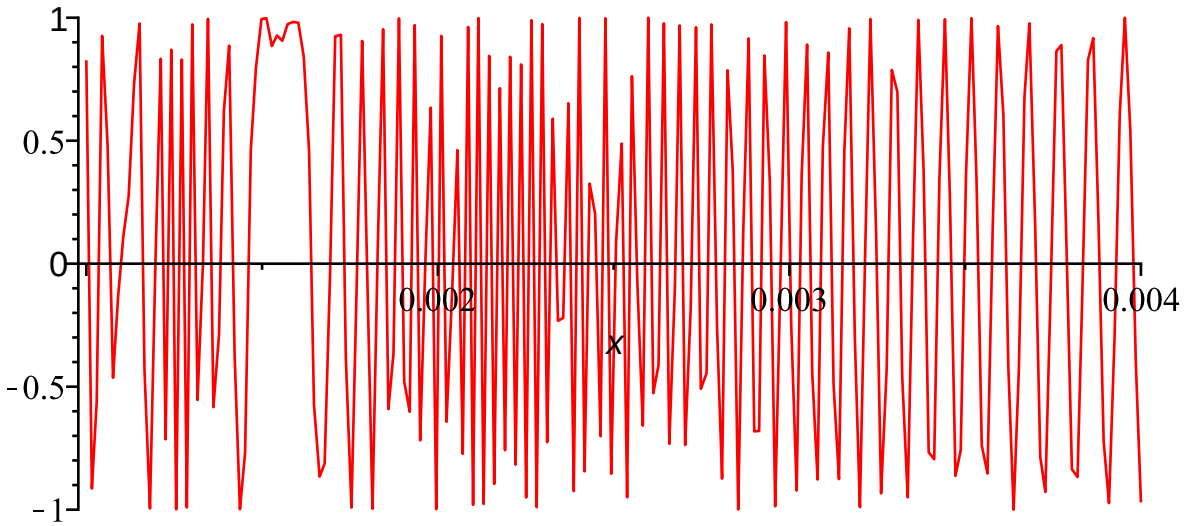

```
> plot(sin(1/x),x=0.001..0.004,numpoints=1000);
```



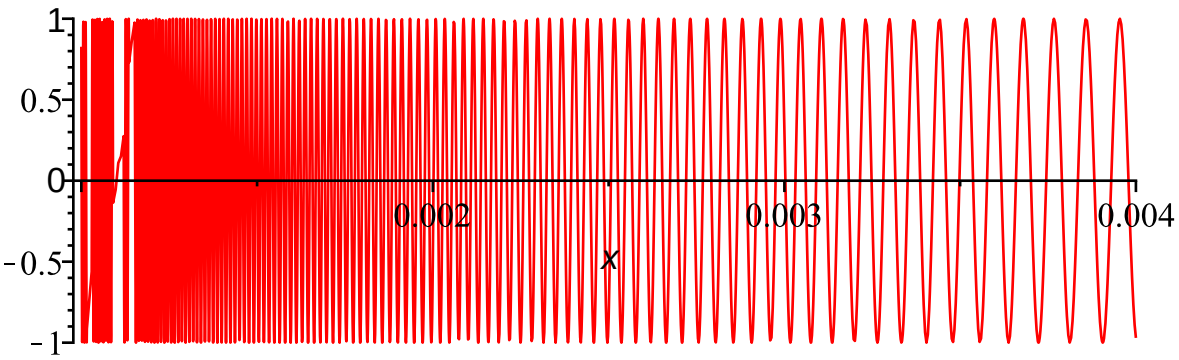

```
> plot(sin(1/x),x=0.001..0.004,numpoints=10,adaptive=false);
```



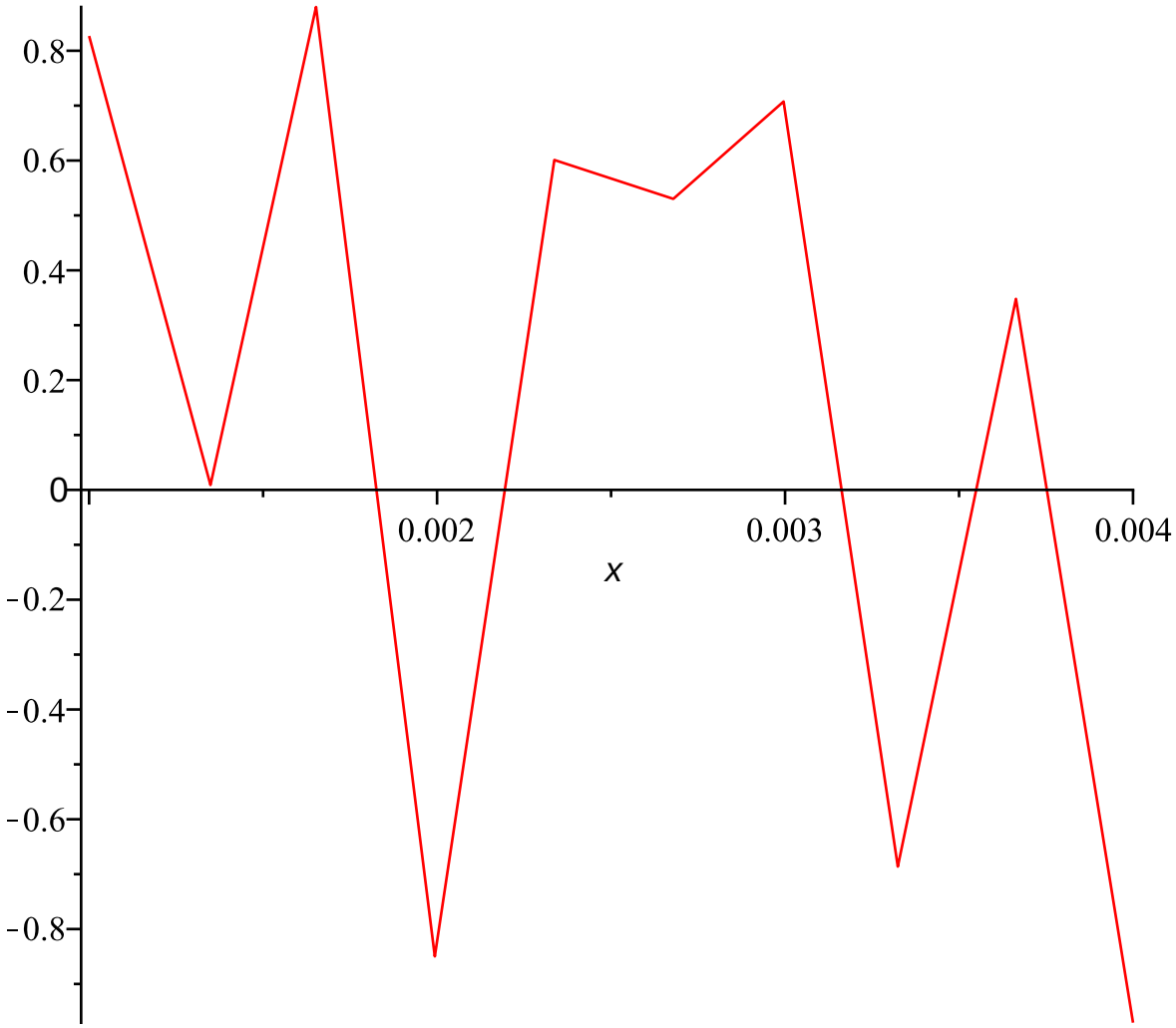

```
> plot(sin(1/x),x=0.001..0.004,adaptive=false);
```



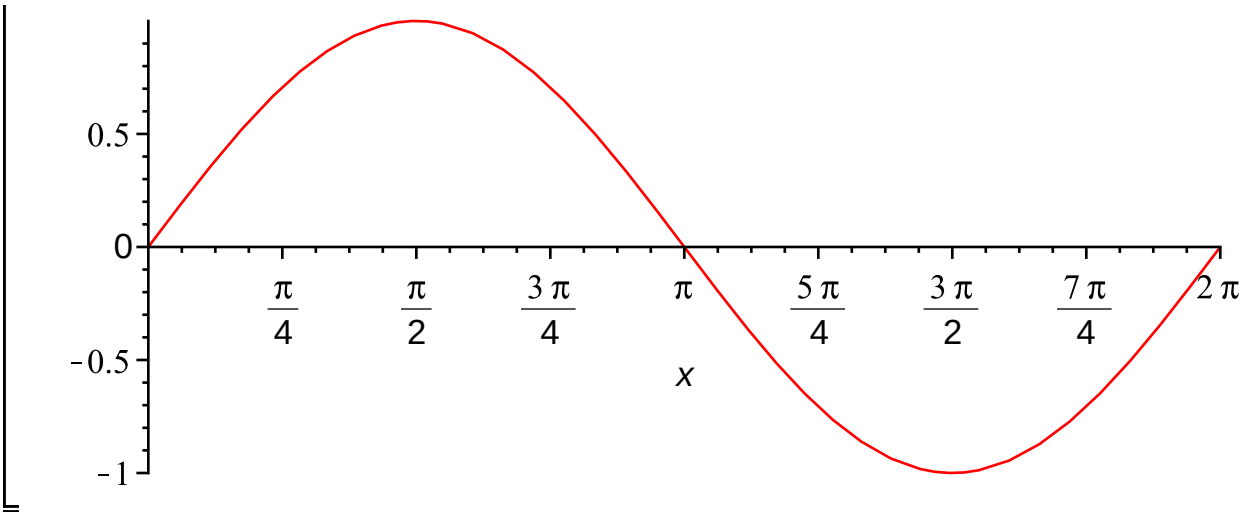

```
> plot(sin(1/x),x=0.001..0.004);
```



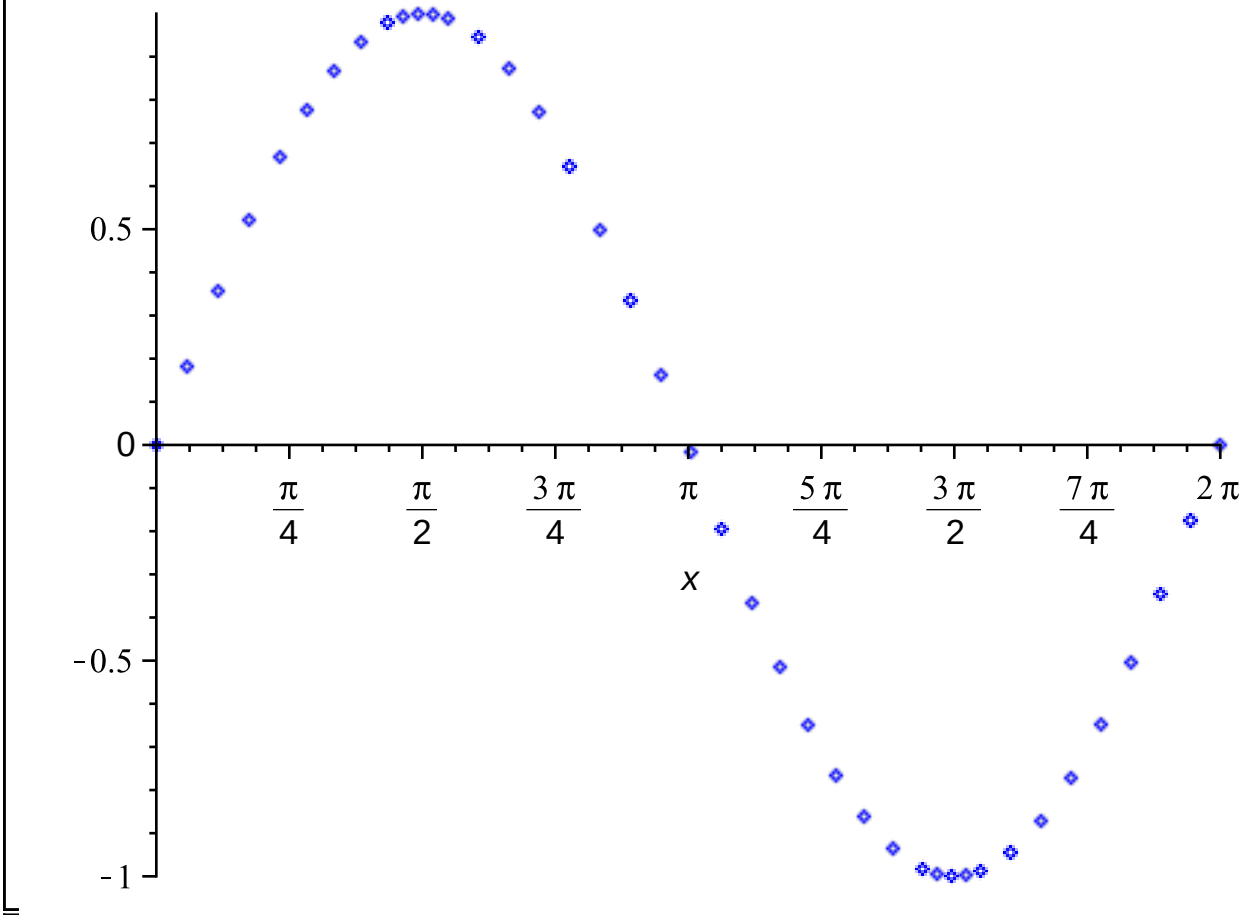

```
> plot(sin(1/x),x=0.001..0.004,adaptive=false,numpoints=10);
```



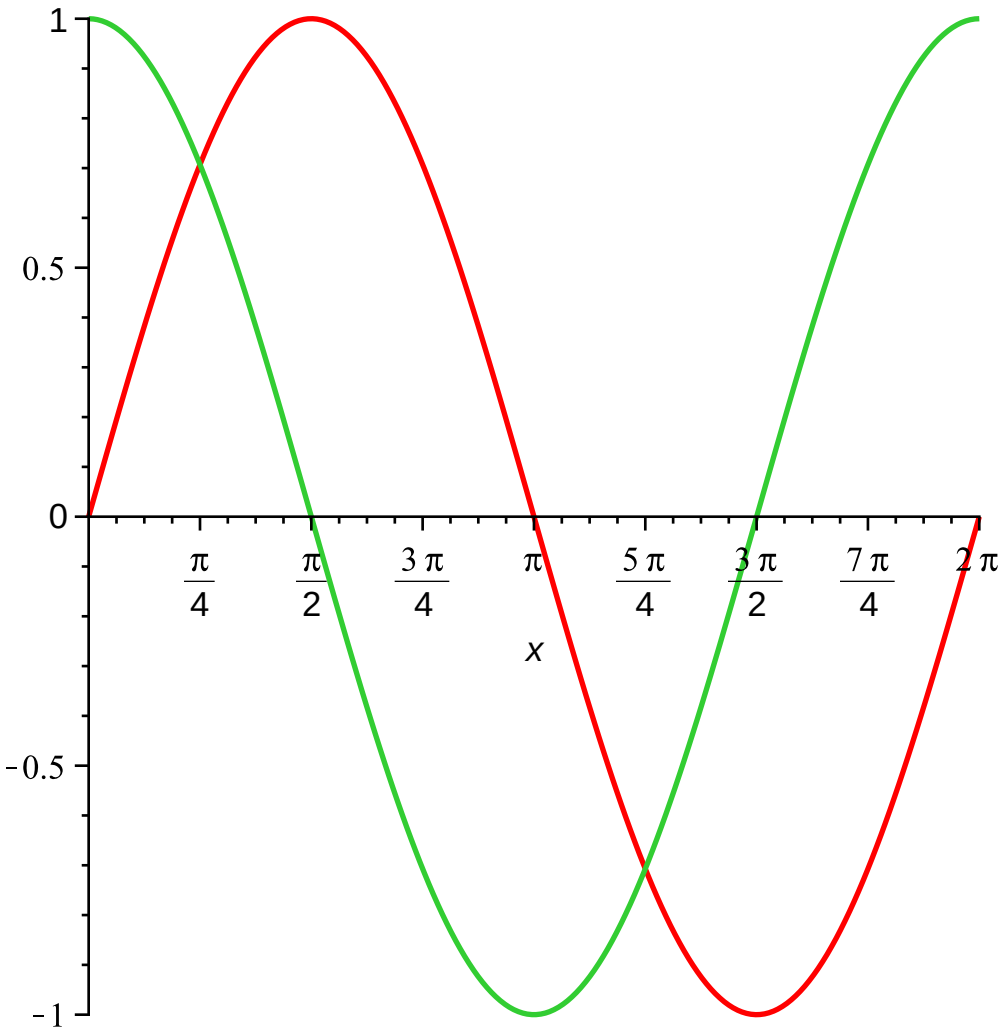

```
> plot(sin(1/x),adaptive=false,numpoints=10,x=0.001..0.004) ;
Error, (in plot) unexpected option: x = 0.1e-2 .. 0.4e-2
> plot(sin(x),x=0..2*Pi,numpoints=10);
```



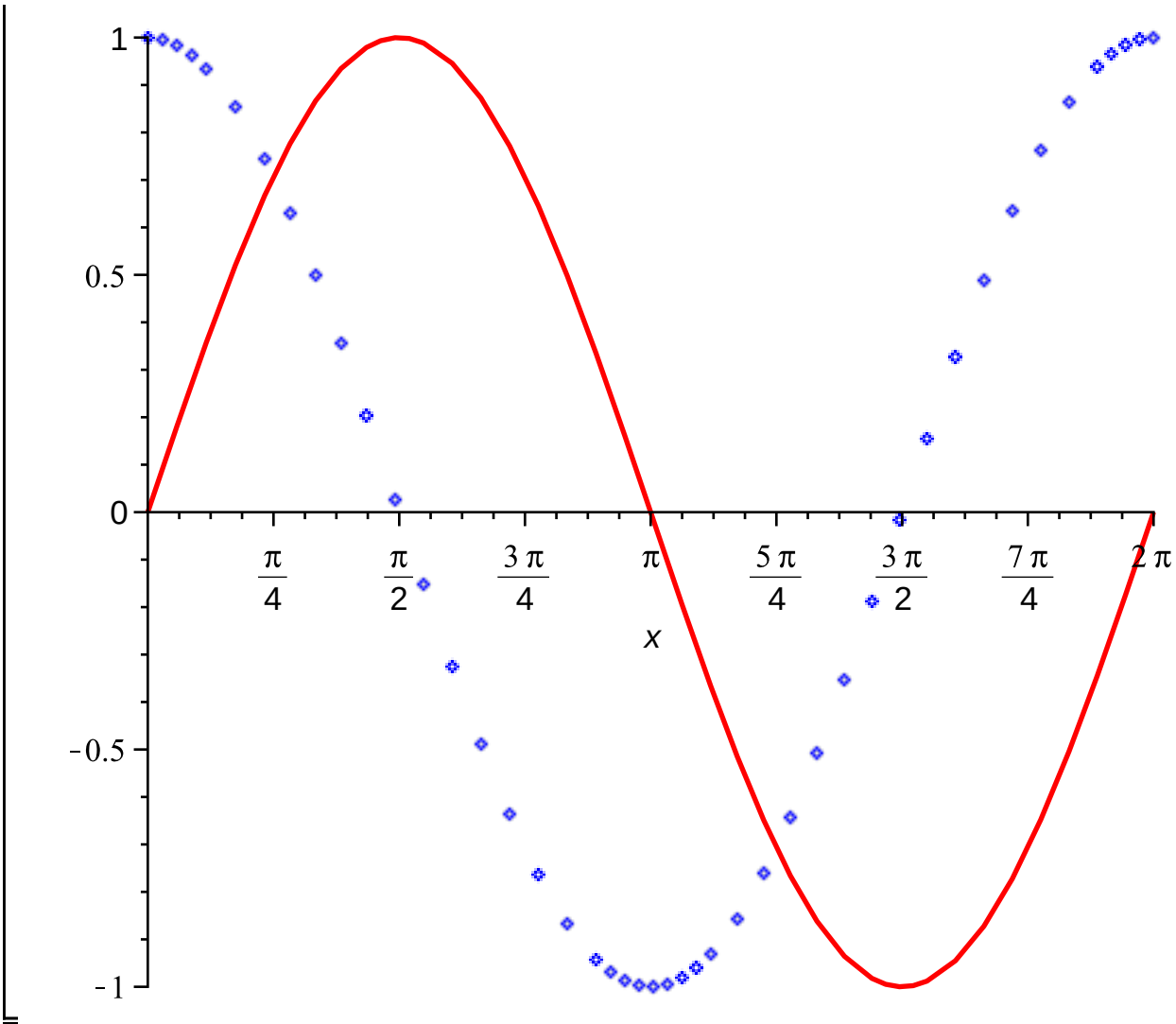

```
> plot(sin(x),x=0..2*Pi,numpoints=10,style=point,color=blue);
```



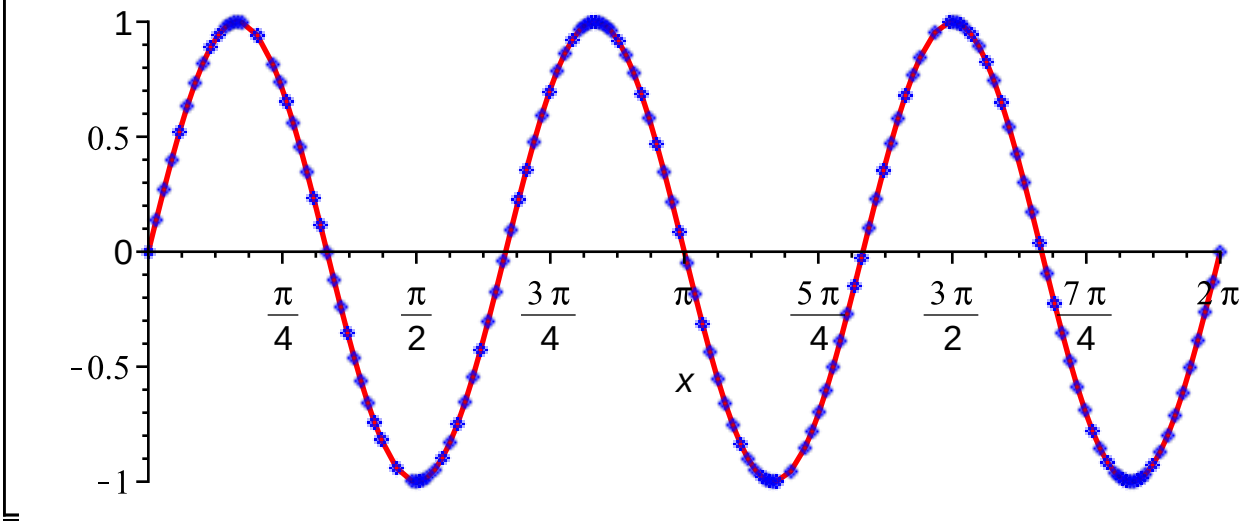

```
> plot([sin(x),cos(x)],x=0..2*Pi,thickness=2);
```



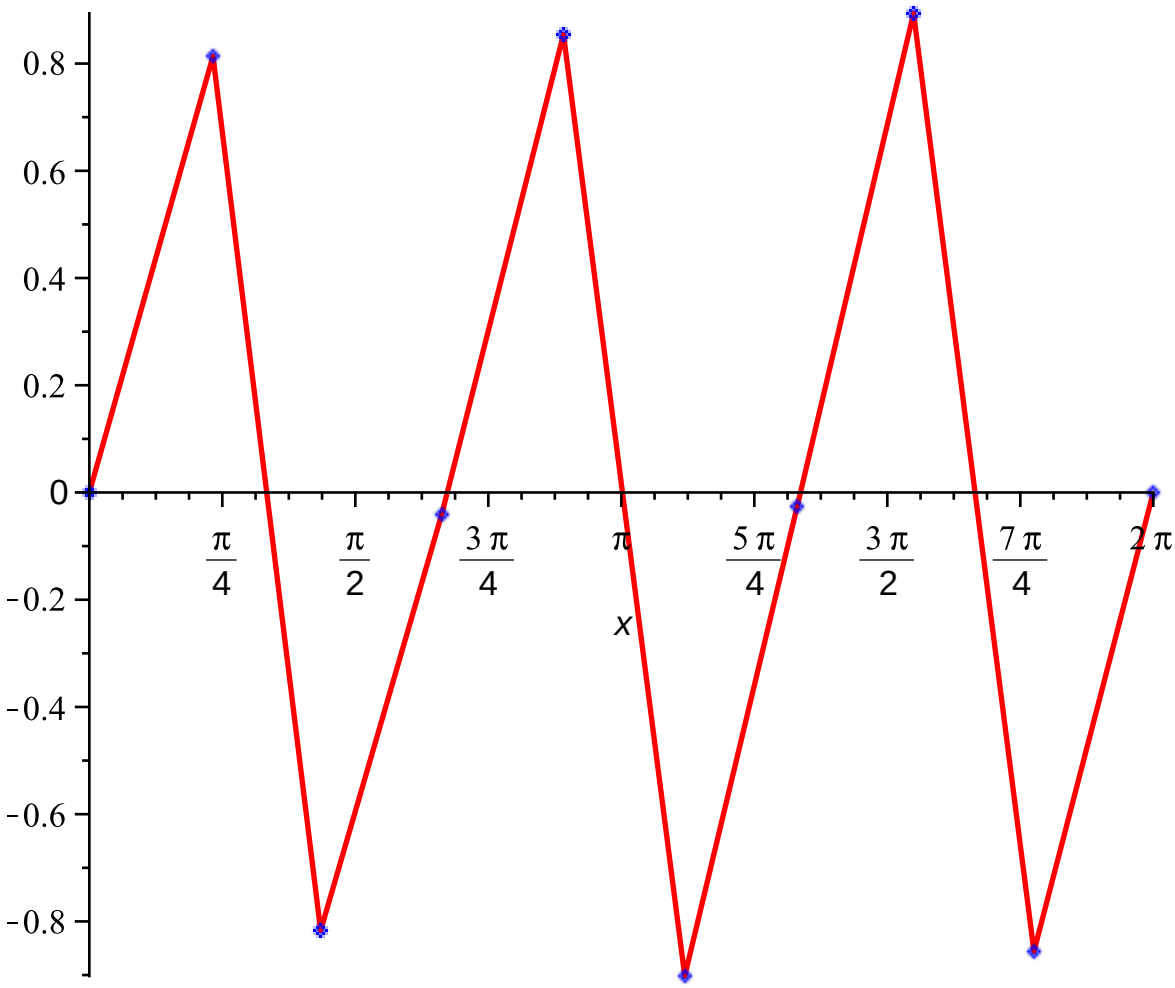

```
> plot([sin(x),cos(x)],x=0..2*Pi,thickness=2,style=[line,point],
  numpoints=10,color=[red,blue]);
```




```
> plot([sin(3*x),sin(3*x)],x=0..2*Pi,thickness=2,style=[line,
  point],numpoints=10,color=[red,blue]);
```



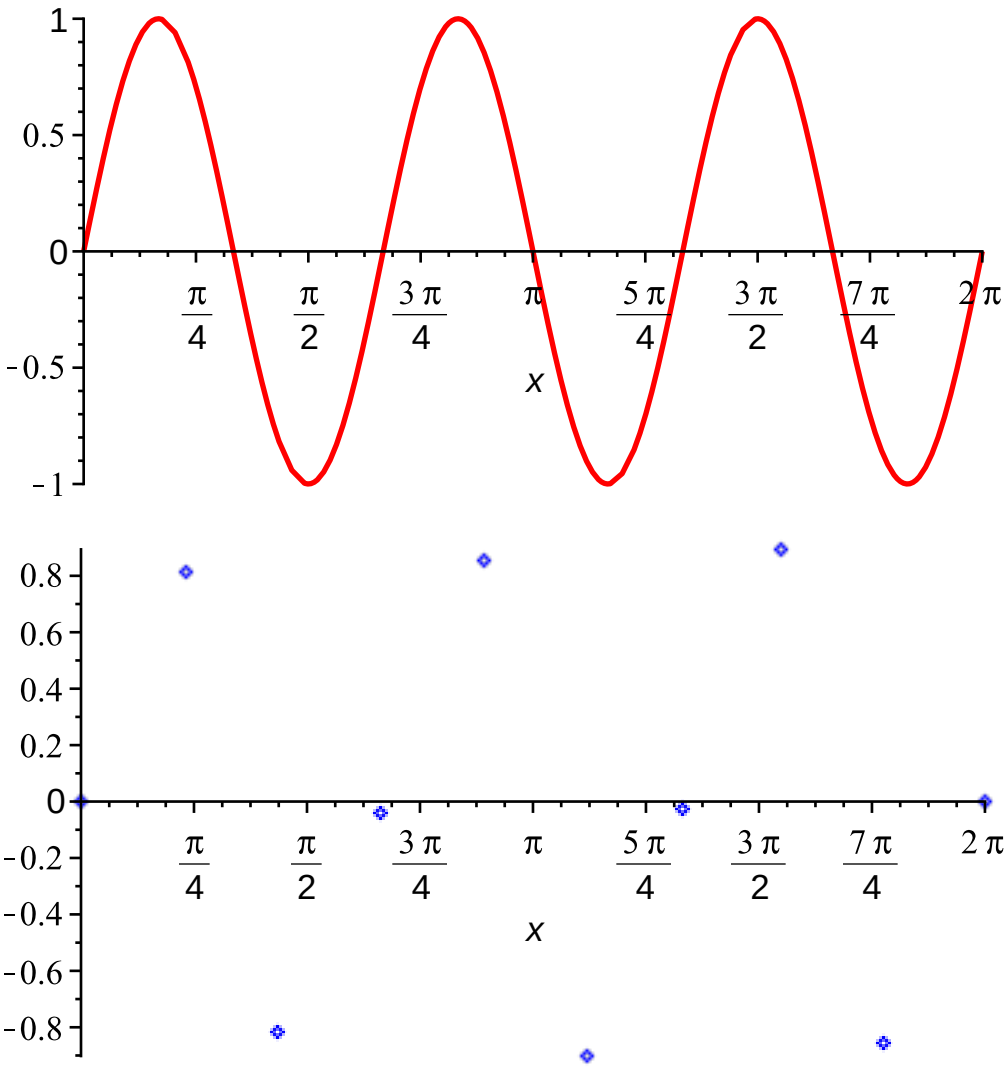

```
> plot([sin(3*x),sin(3*x)],x=0..2*Pi,thickness=2,style=[line,
  point],numpoints=10,color=[red,blue],adaptive=false);
```




```
> plot([sin(3*x),sin(3*x)],x=0..2*Pi,thickness=2,style=[line,
  point],numpoints=10,color=[red,blue],adaptive=[true,false]);
```

Error, (in plot) invalid input: Plot:-Preprocess expects value for keyword parameter adaptive to be of type {boolean, nonnegint}, but received [true, false]

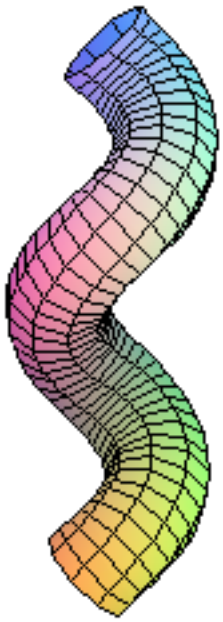
```
> plot(sin(3*x),x=0..2*Pi,thickness=2,style=line,numpoints=10,
  color=red,adaptive=true);
  plot(sin(3*x),x=0..2*Pi,thickness=2,style=point,numpoints=10,
  color=blue,adaptive=false);
```




```
> with(plots);
```

[*animate*, *animate3d*, *animatecurve*, *arrow*, *changecoords*, *complexplot*, *complexplot3d*, *conformal*, *conformal3d*, *contourplot*, *contourplot3d*, *coordplot*, *coordplot3d*, *densityplot*, *display*, *dualaxisplot*, *fieldplot*, *fieldplot3d*, *gradplot*, *gradplot3d*, *implicitplot*, *implicitplot3d*, *inequal*, *interactive*, *interactiveparams*, *intersectplot*, *listcontplot*, *listcontplot3d*, *listdensityplot*, *listplot*, *listplot3d*, *loglogplot*, *logplot*, *matrixplot*, *multiple*, *odeplot*, *pareto*, *plotcompare*, *pointplot*, *pointplot3d*, *polarplot*, *polygonplot*, *polygonplot3d*, *polyhedra_supported*, *polyhedraplot*, *rootlocus*, *semilogplot*, *setcolors*, *setoptions*, *setoptions3d*, *spacecurve*, *sparsematrixplot*, *surfdata*, *textplot*, *textplot3d*, *tubeplot*] **(1)**

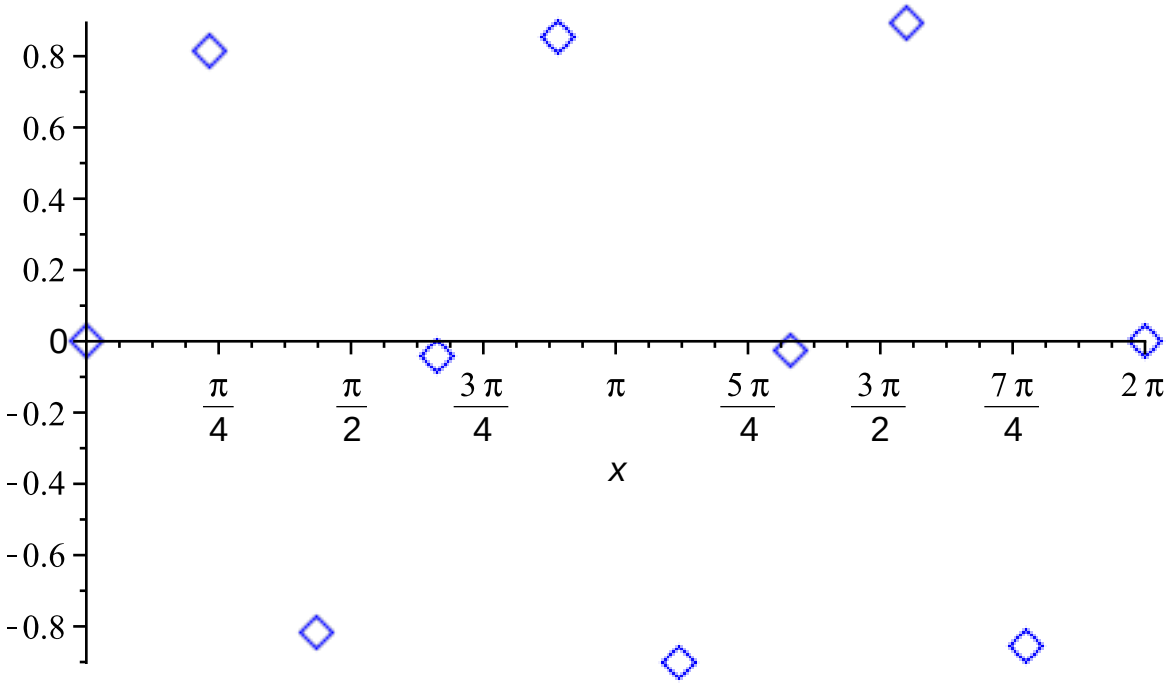
```
> tubeplot([cos(t),sin(t),t],t=0..10,scaling=constrained);
```



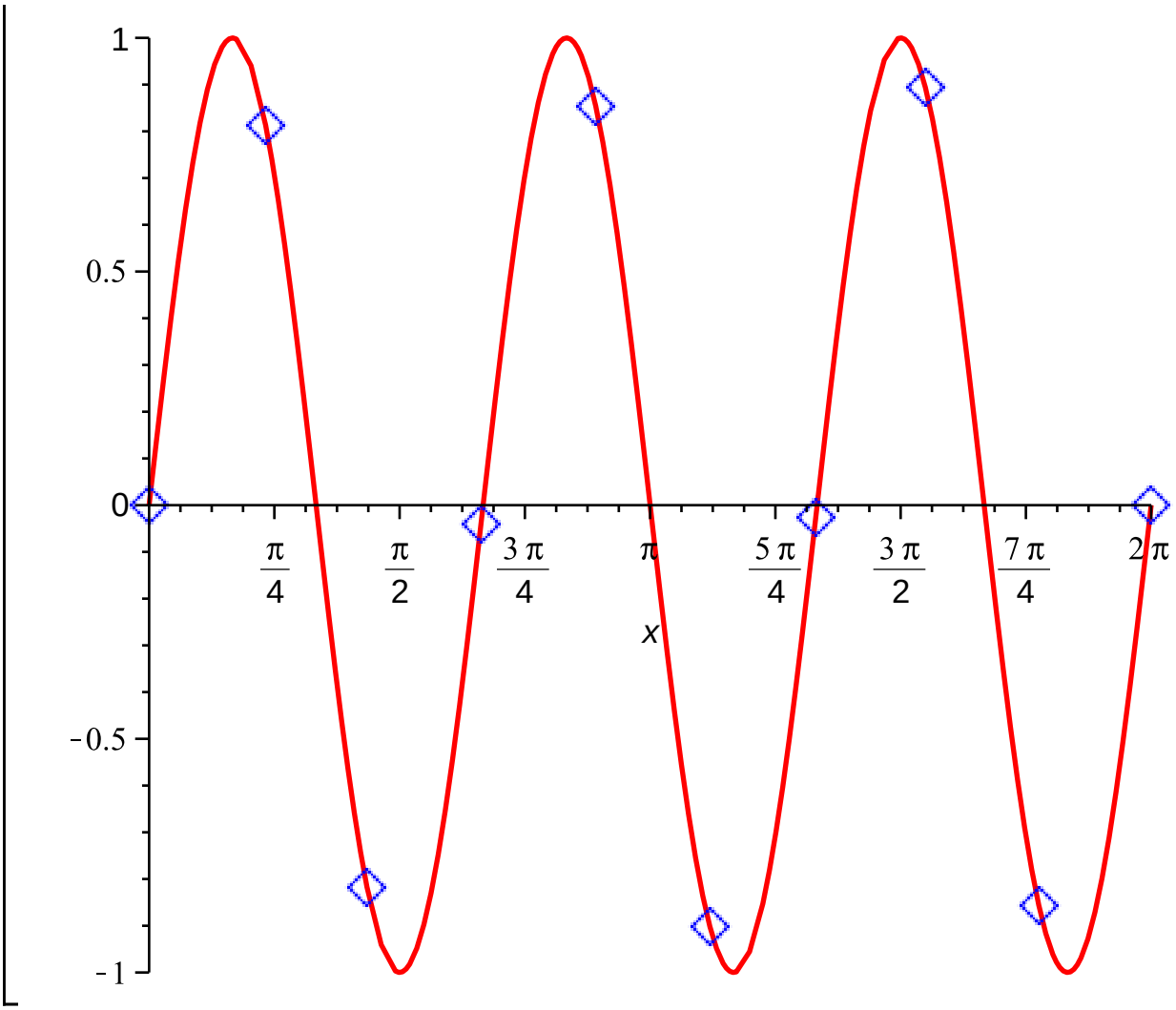
```
> unwith(plots);
> tubeplot([cos(t),sin(t),t],t=0..10,scaling=constrained);
```

$$tubeplot([\cos(t), \sin(t), t], t = 0..10, scaling = constrained) \quad (2)$$

```
> with(plots):
> p1:=plot(sin(3*x),x=0..2*Pi,thickness=2,style=line,numpoints=10,
  color=red,adaptive=true):
  p2:=plot(sin(3*x),x=0..2*Pi,thickness=2,style=point,numpoints=10,
  color=blue,adaptive=false,symbolsize=25):
> p2;
```




```
> display({p1,p2});
```




```
> cub:= x -> a*x^2+b*x+c;
```

$$cub := x \to a\,x^2 + b\,x + c \tag{3}$$

```
> cub(2);
```

$$4\,a + 2\,b + c \tag{4}$$

```
> pts:= [ [0,1], [2,3], [10,4]];
```

$$pts := [[0, 1], [2, 3], [10, 4]] \tag{5}$$

```
> pts[2];
```

$$[2, 3] \tag{6}$$

```
> pts[2][1];
```

$$2 \tag{7}$$

```
> pts[2][2];
```

$$3 \tag{8}$$

```
> {cub(0)=1,cub(2)=3,cub(10)=4};
```

$$\{c = 1, 4\,a + 2\,b + c = 3, 100\,a + 10\,b + c = 4\} \tag{9}$$

```
> solve(%,{a,b,c});
```

$$\left\{a = -\frac{7}{80}, b = \frac{47}{40}, c = 1\right\} \tag{10}$$

```
> subs(%,cub(x));
```

$$-\frac{7}{80}x^2+\frac{47}{40}x+1 \tag{11}$$