

```

[ > restart;
[ > f:=(x,y)->0.2*x*y;
                                f:=(x,y)→0.2xy
[ > x[0]:=1;
  y[0]:=1;
                                x0:=1
                                y0:=1
[ > n:=5;
  h:=1.0/n;
                                n:=5
                                h:=0.2000000000
[ > for i from 0 to n-1 do
  x[i+1]:=x[0]+h*(i+1);
  y[i+1]:=y[i]+h*f(x[i],y[i]);
od:
[ > yc:=x->exp(-.1)*exp(x^2*.1);
                                yc:=x→e(-0.1)e(0.1x2)
[ > matrix([seq([x[i],y[i],yc(x[i]),
  abs(y[i]-yc(x[i])),
  abs((y[i]-yc(x[i]))/yc(x[i]))],i=0..n)]);
                                [
                                1          1          0.9999999999    0.1 10-9    0.1000000000 10-9]
                                1.200000000  1.040000000  1.044982355  0.004982355  0.004767884334
                                1.400000000  1.089920000  1.100759064  0.010839064  0.009846899612
                                1.600000000  1.150955520  1.168826203  0.017870683  0.01528942708
                                1.800000000  1.224616673  1.251071019  0.026454346  0.02114535913
                                2.000000000  1.312789073  1.349858808  0.037069735  0.02746193512 ]
[ >

```