```
clear all;
clc;

syms u x;

f = exp(-u^2/2);
I=int(f,u,x,inf);

g=@(u) exp(-u.^2./2);

i=1;
for X=0:0.05:10
    A(i,1)=X;
    A(i,2)=subs(I,X);
    A(i,3)=quad(g,X,10^15);
    i=i+1;
end
figure;
plot(A(:,1),A(:,2),A(:,1),A(:,3));
legend('Integral sym.','Integral num.');
figure;
plot(A(:,1),A(:,2)-A(:,3));
legend('Abweichung sym-num');


X=10
sym=subs(I,X)
num=quad(g,X,10^15)
sym-num


X =

    10


sym =

  1.9100e-023


num =

  4.0741e-009
```

```
ans =

 -4.0741e-009
```