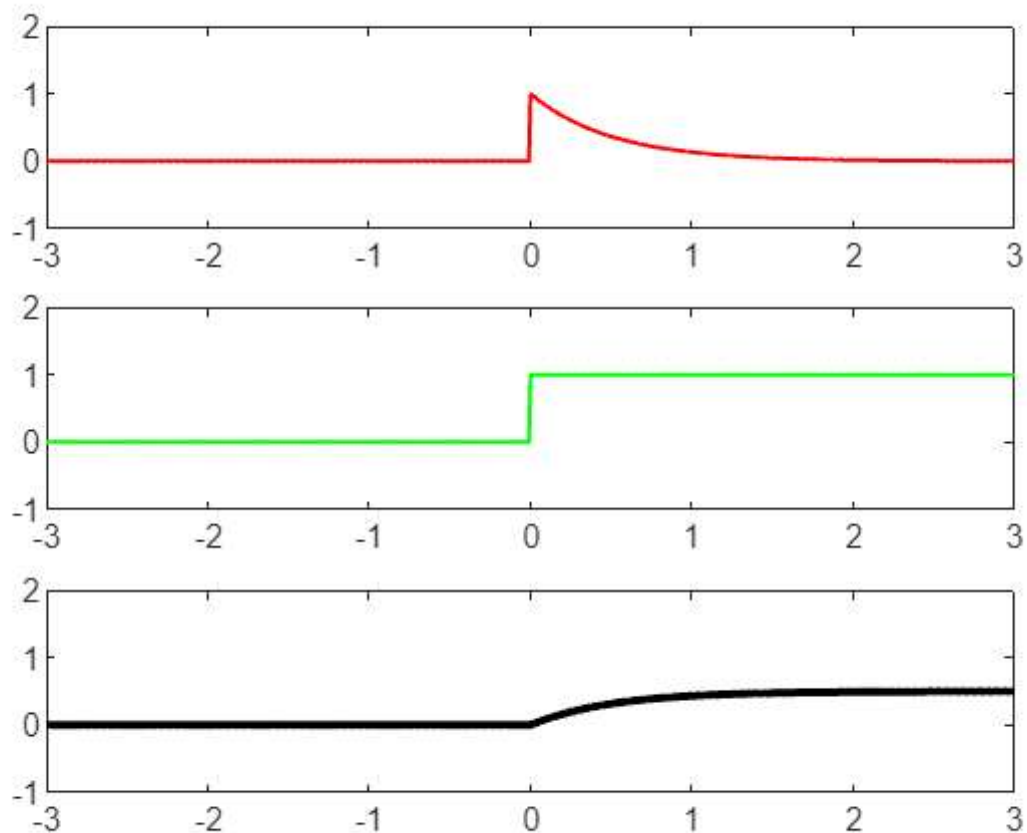```
sympref("HeavisideAtOrigin",1);
syms t;
syms T;
t_range=-10:0.01:10;
x2=exp(-2*t).*heaviside(t);
h2=heaviside(t);
h2=subs(h2,t,t-T);
x2=subs(x2,t,T);
f2=x2.*h2;
k2=int(f2,T,[-inf,inf]);
y2=subs(k2,t,t_range);
figure;
subplot(3,1,1)
plot(t_range,subs(x2,T,t_range),"r",LineWidth=1);
axis([-3 3 -1 2]);
subplot(3,1,2)
plot(t_range,subs(h2,t-T,t_range),"g",LineWidth=1);
axis([-3 3 -1 2]);
subplot(3,1,3)
plot(t_range,y2,"k",LineWidth=2);
axis([-3 3 -1 2]);
```



```
syms t;
```

```
syms T;
t_range=-10:0.01:10;
x3=t*(heaviside(t)-heaviside(t-2));
h3=heaviside(t+1)-heaviside(t-1);
h3=subs(h3,t,t-T);
x3=subs(x3,t,T);
f3=x3.*h3;
k3=int(f3,T,[-inf,inf]);
y3=subs(k3,t,t_range);
figure;
subplot(3,1,1)
plot(t_range,subs(x3,T,t_range),"r",LineWidth=1);
axis([-3 3 -1 2]);
subplot(3,1,2)
plot(t_range,subs(h3,t-T,t_range),"g",LineWidth=1);
axis([-3 3 -1 2]);
subplot(3,1,3)
plot(t_range,y3,"k",LineWidth=2);
```