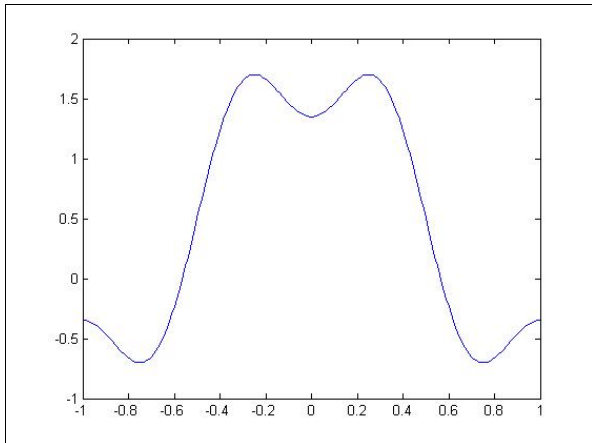## Signals and Systems HW05   Problem 5
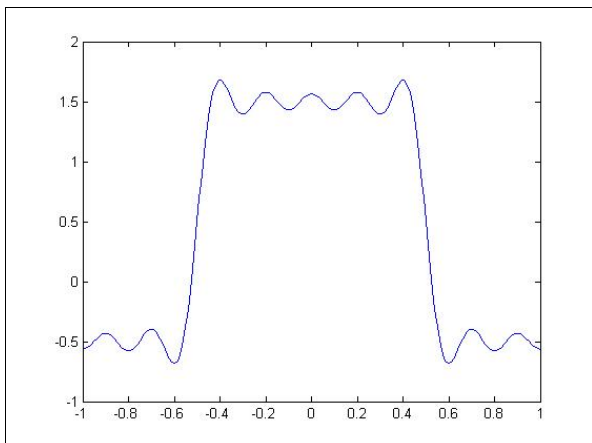
N=3


```
a=-1:0.01:1;
for t=1:1:201;
    T=t-101;
    x(t)=0.5;
    for k=1:2:3;
        x(t)=x(t)+2.*sinc(k./2).*exp(j.*k*pi.*(T.*0.01));
    end;
end;
plot(a,x);
```
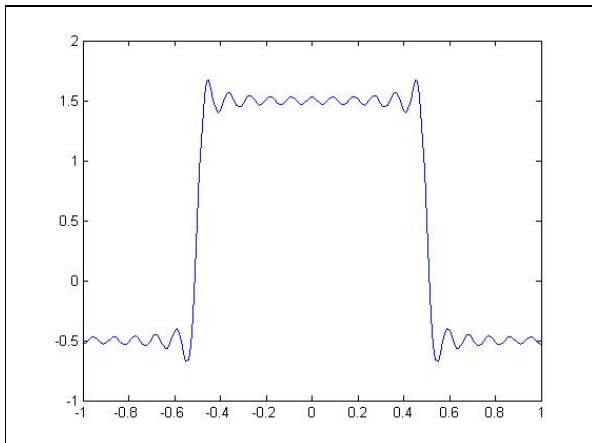
N=9


```
a=-1:0.01:1;
for t=1:1:201;
    T=t-101;
    x(t)=0.5;
    for k=1:2:9;
        x(t)=x(t)+2.*sinc(k./2).*exp(j.*k*pi.*(T.*0.01));
    end;
end;
plot(a,x);
```

N=21


```
a=-1:0.01:1;
for t=1:1:201;
    T=t-101;
    x(t)=0.5;
    for k=1:2:21;
        x(t)=x(t)+2.*sinc(k./2).*exp(j.*k*pi.*(T.*0.01));
    end;
end;
plot(a,x);
```

N=45
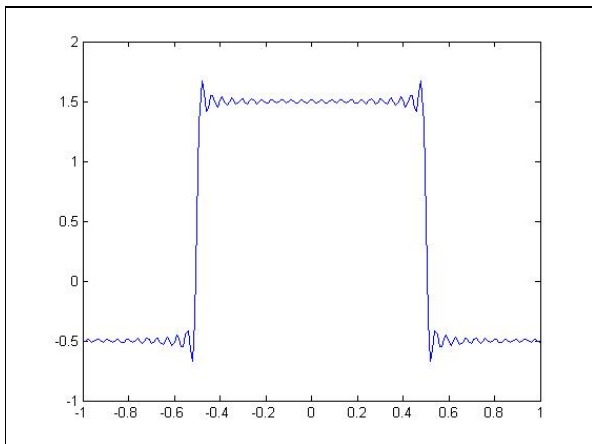

```
a=-1:0.01:1;
for t=1:1:201;
    T=t-101;
    x(t)=0.5;
    for k=1:2:45;
        x(t)=x(t)+2.*sinc(k./2).*exp(j.*k*pi.*(T.*0.01));
    end;
end;
plot(a,x);
```