

```
hold off;
clear;
t= 0:.001:10;
s=0.5+0.5*square(pi*t);
plot(t,s);
hold on;
s0= .5;
s1=s0+2/pi*sin(pi*t);
plot(t,s1,'g');
s2=s1+2/(3*pi)*sin(3*pi*t);
plot(t,s2,'b');
s3= s2 + 2/(5*pi)*sin(5*pi*t);
plot(t,s3,'y');
s4= s3 + 2/(7*pi)*sin(7*pi*t);
plot(t,s4,'r');

h=figure();
s=0.5+0.5*square(pi*t);
plot(t,s,'g');
hold on;
s=0.5;
for i=1:50
    n=2*i-1;
    s=s+2/(n*pi)*sin(n*pi*t);
end
plot(t,s);
```