l191316 lab 8 work:

8.2:

n=[1:1:10];

a0=0;

an=0;

bn=[8./((n.^2).\*(pi.^2))].\*[sin(n.\*(pi./2))];

an2=0;

bn2=bn.^2;

cn=sqrt(an2+bn2);

cn=[0 cn];

thetha=atan(-bn./an);

thetha=[0 thetha];

n=[0:1:10];

subplot(211), stem(n, cn,'o');

title('CN');

ylabel('y-axis');

grid;

subplot(212),stem(n, thetha);

title('THETHA');

ylabel('y-axis');

grid;



8.3:

n=[1:1:10];

a0=0;

an=0;

bn=(4./((n.^2).\*(pi.^2))).\*[sin(n.\*pi./2)-cos(n.\*pi./2)];

an2=0;

bn2=bn.^2;

cn=sqrt(an2+bn2);

cn=[0 cn];

n=[0:1:10];

theta=atan(-bn./an);

theta=[0 theta];

subplot(211), stem(n, cn);

title('CN');

ylabel('y-axis');

grid;

theta\_deg=rad2deg(theta);

subplot(212),stem(n, theta\_deg);

title('THETHA');

ylabel('y-axis');

grid;

