**Exercise 2**

Ts = 0.5;

for i = 0:7

a(i+1) = i;

x(i+1) = power(0.8, i\*Ts);

end;

stem(a,x)

****

**Exercise 3**

tau = 0.5;

omega = [-50:0.001:50];

arg = pi\*omega\*tau/2;

plot(omega, (tau\*sin(arg))./arg);

tau = 0.5;

****

tau = 2;

****