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```
1.      commandwindow
2.      clear
3.      clc
4.      close all
5.      syms t
6.      Q(t)=0.25*sin(0.2*3.142*t
       )
7.      V(t)=0.5*cos(0.2*3.142*t)
8.      tn=[0:0.0001:0.35]
9.      I=diff(Q(t))
10.     In=subs(I,tn)
11.     figure(1)
12.     plot(tn,In)
13.     xlabel('time(sec)')
14.     ylabel('current(A)')
15.     axis tight
16.     grid on
17.     grid minor
18.     P=I*VPn=subs(P,tn)
19.     figure(2)
20.     plot(tn,Pn)
21.     xlabel('time(sec)')
22.     ylabel('power(watts)')
23.     axis tight 24.     grid on
25. grid minor
26. figure(3) 27.
    plot(tn,In,'r',tn,Pn,'b'
)
28.     xlabel('time(sec)')
29.     grid on
30.     grid minor
```