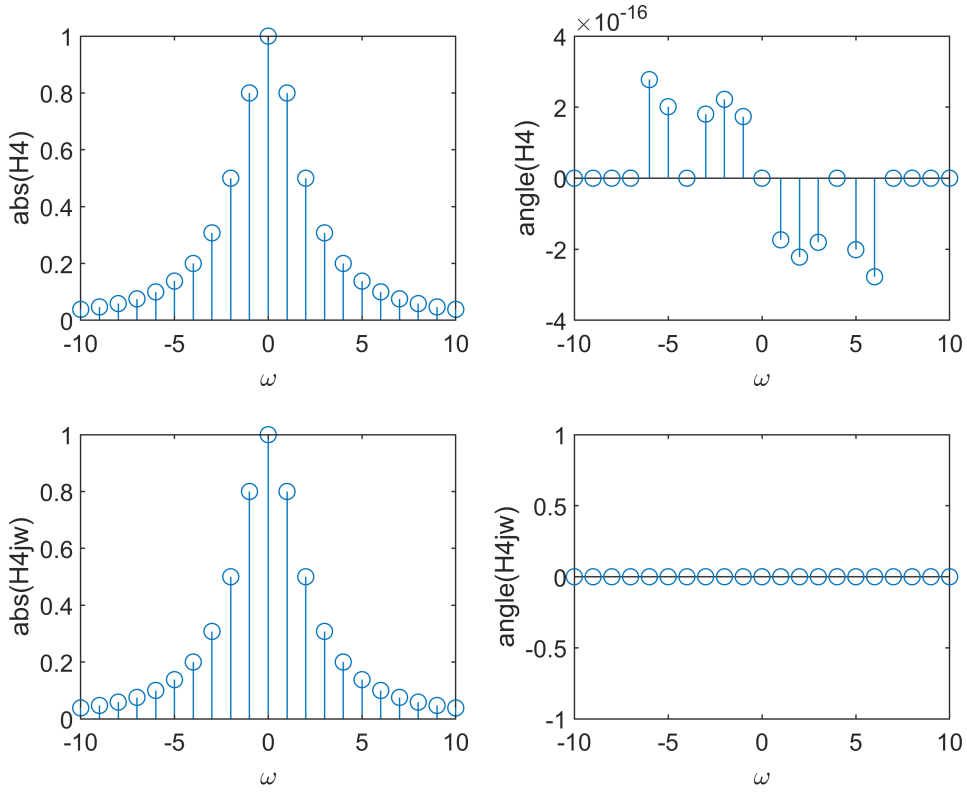
```
b3=[-4];
a3=[1,0,-4];
[r3,p3]=residue(b3,a3);
w3=[-10:1:10];
H4=r3(1)./((1i*w3)-p3(1))+r3(2)./((1i*w3)-p3(2));
subplot(2,2,1),stem(w3,abs(H4)),xlabel('\omega'),ylabel('abs(H4)');
subplot(2,2,2),stem(w3,angle(H4)),xlabel('\omega'),ylabel('angle(H4)');
H4jw=(-4)./((1i*w3).^2-4);
subplot(2,2,3),stem(w3,abs(H4jw)),xlabel('\omega'),ylabel('abs(H4jw)');
subplot(2,2,4),stem(w3,angle(H4jw)),xlabel('\omega'),ylabel('angle(H4jw)');
```




```
%From the second picture,we can know that the value at every point is so
%small that we can ignore them.So the pictures are approximately the same
%for the two function.
```