
```
%This script creates complex numbers and plots them
```

```
% EstherCheng  
% ENGR 405  
% ChengLab7Problem2
```

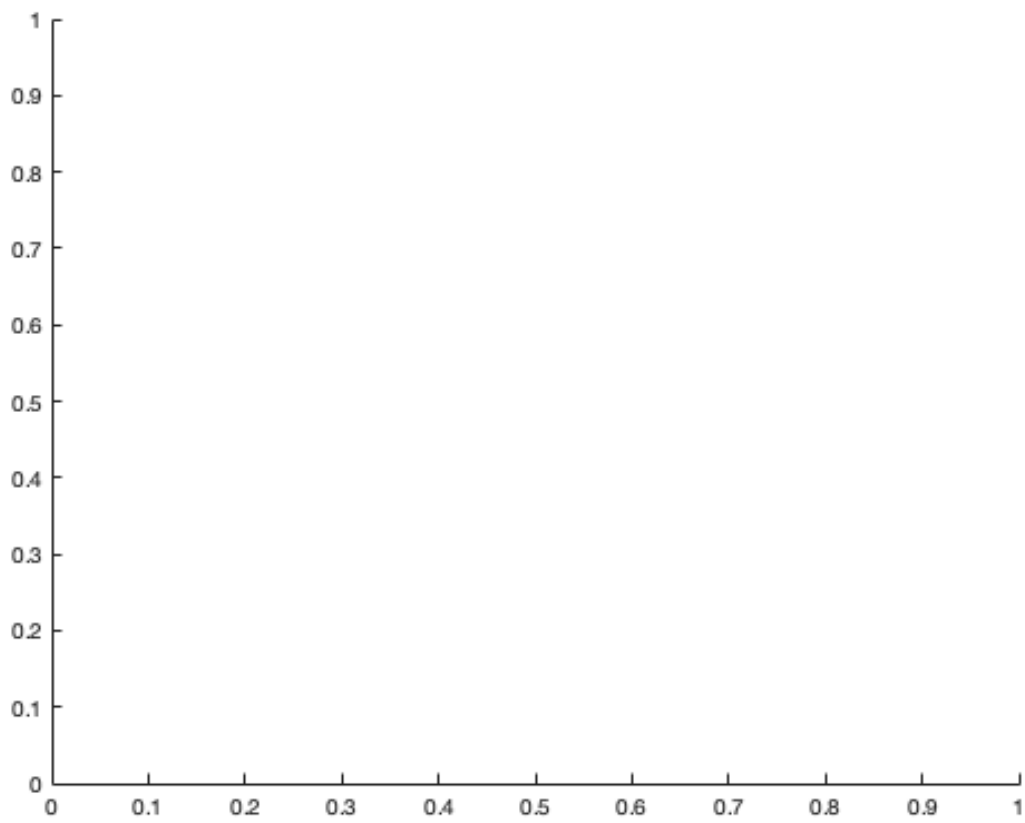
```
%Clear previous plots  
clear
```

```
%Initialize all the given complex numbers
```

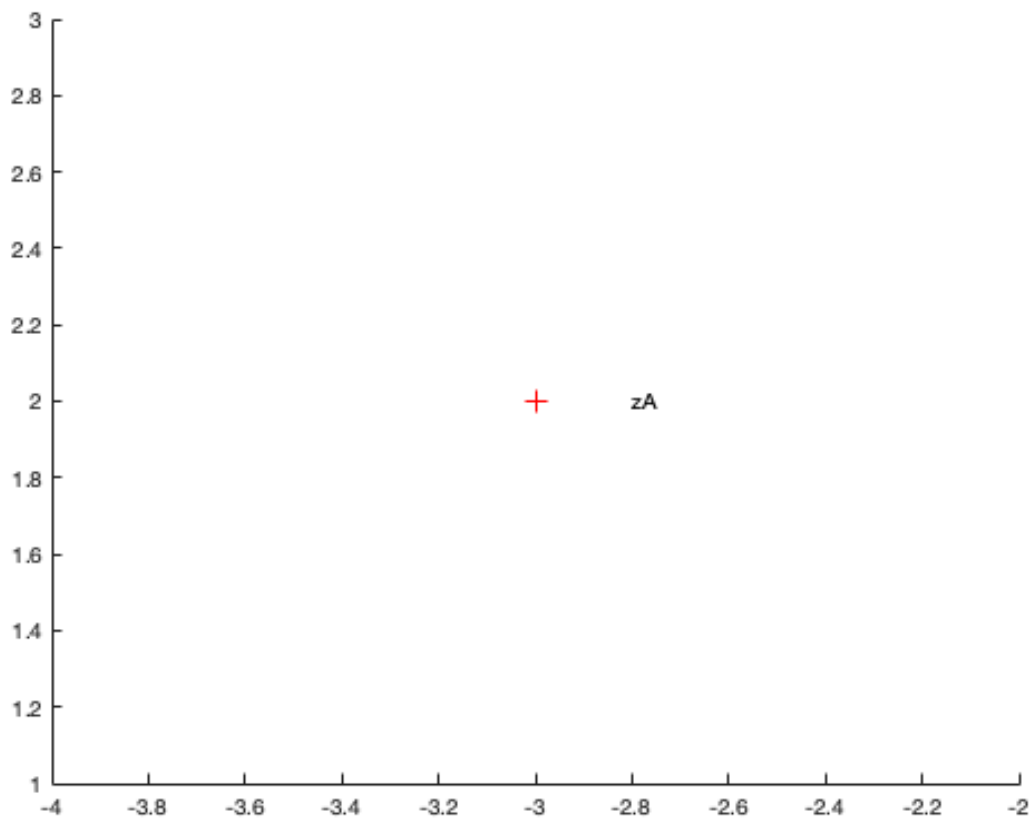
```
zA = -3 + j * 2;  
zB = -1 + j;  
z1 = 2*zA - zB;  
z2 = -zA;  
z3 = conj(zB);  
z4 = zA * exp(j * (pi / 2));  
z5 = zA * zB;  
z6 = zB / zA;  
z7 = sqrt(zA);
```

```
%Plot complex numbers by creating code cells
```

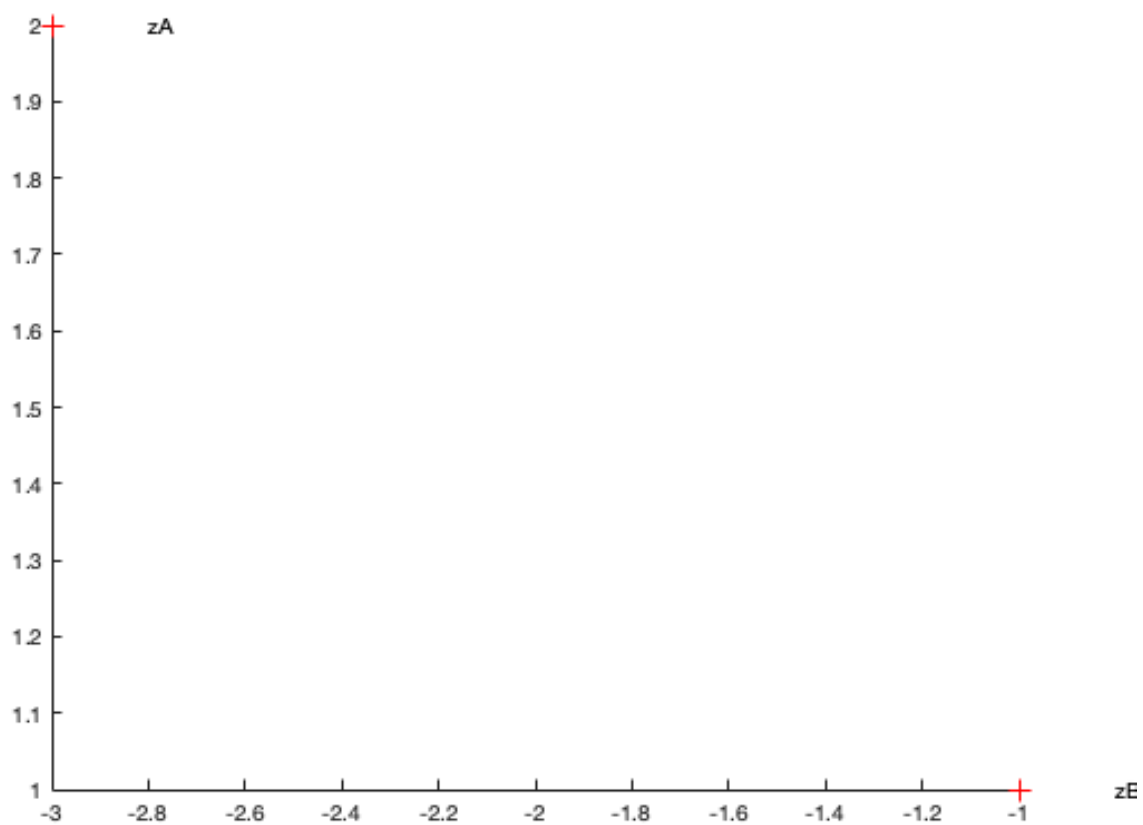
```
hold on;  
os = 0.2;
```



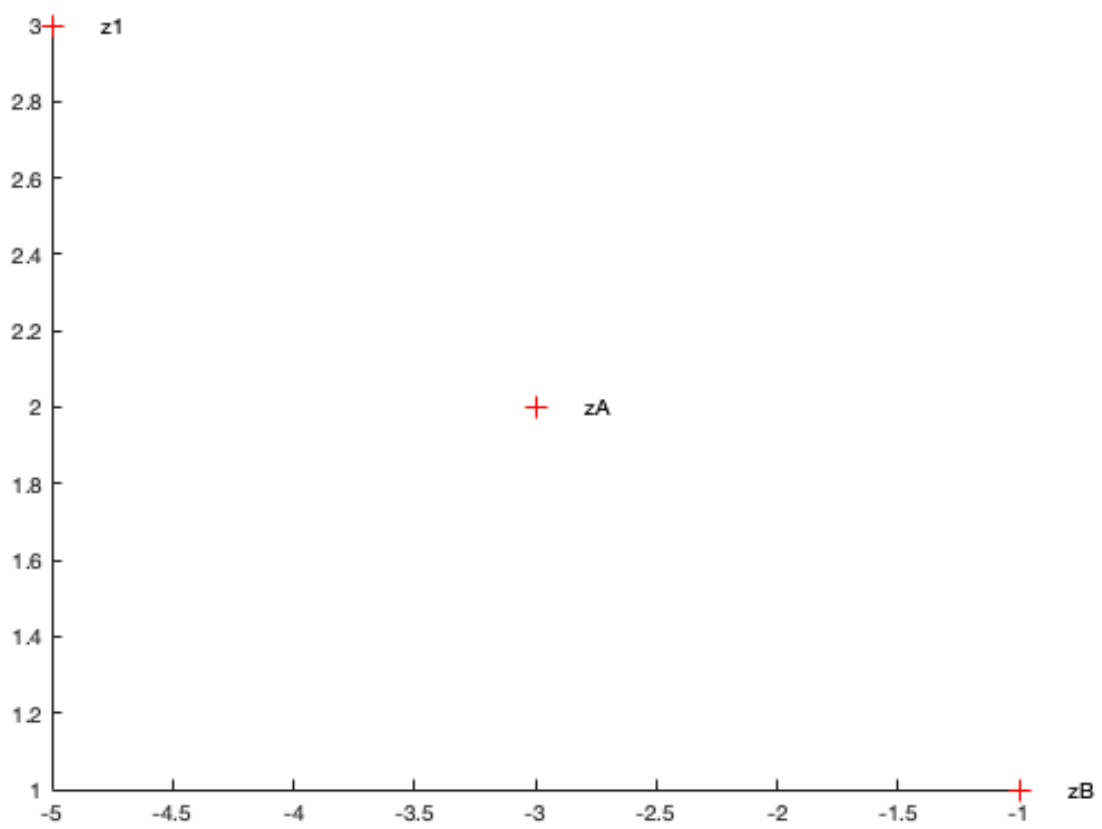
```
plot(zA, 'r+');  
text(real(zA)+os, imag(zA), 'zA');
```



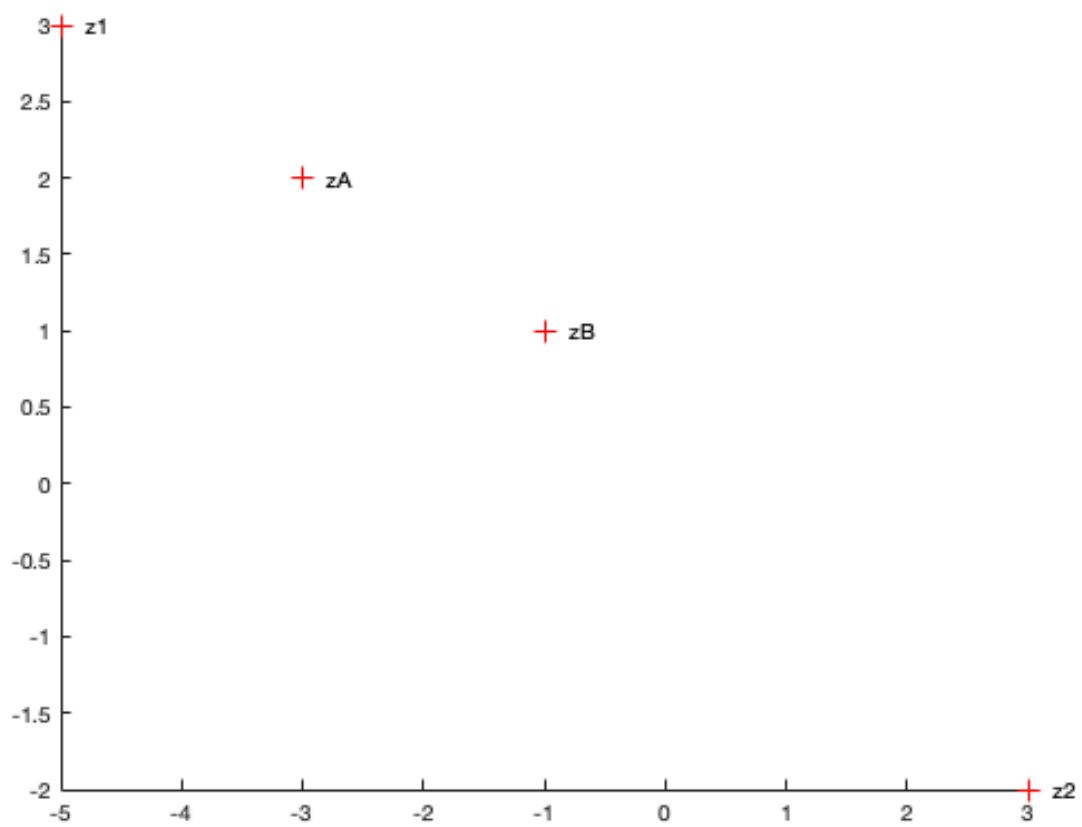
```
plot(zB, 'r+');  
text(real(zB)+os, imag(zB), 'zB');
```



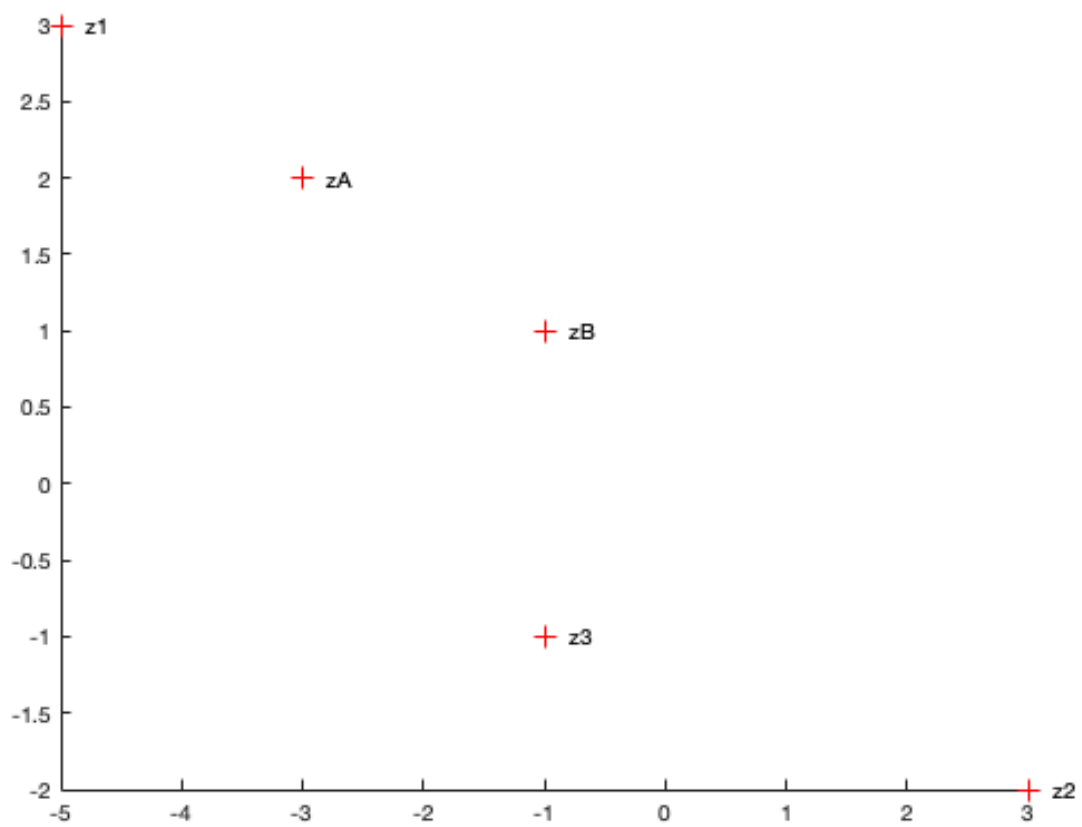
```
plot(z1, 'r+');  
text(real(z1)+0.5, imag(z1), 'z1');
```



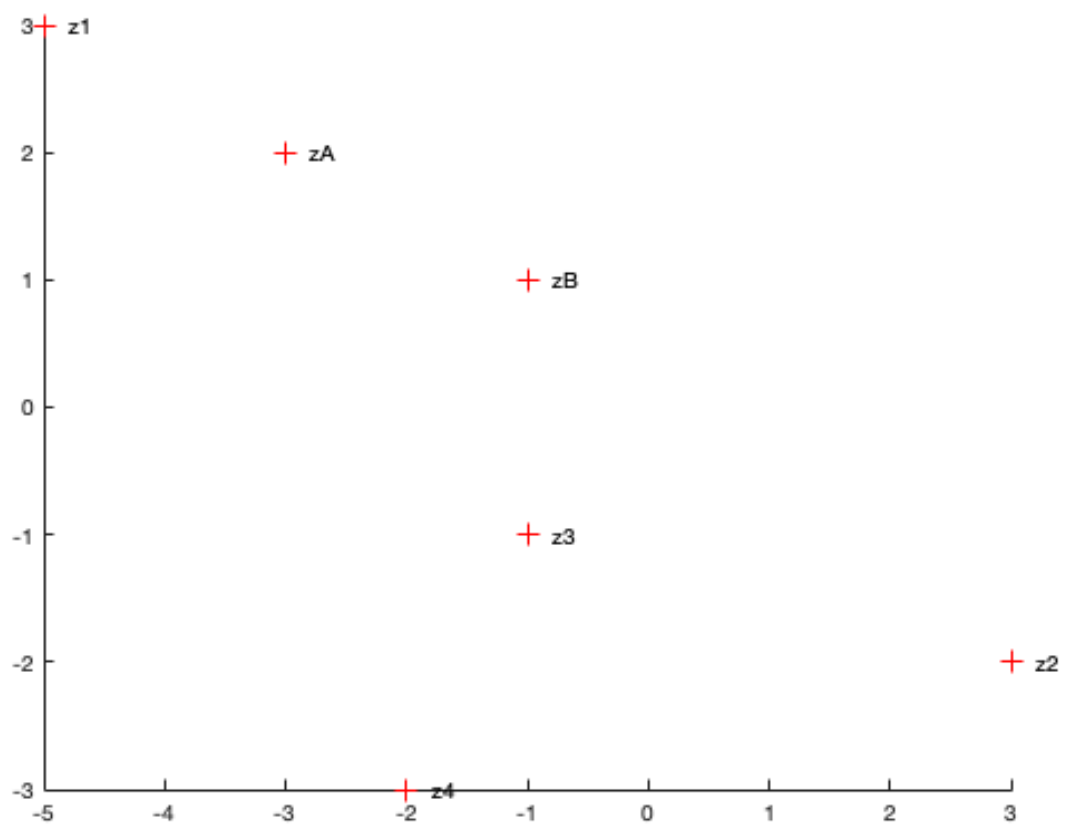
```
plot(z2, 'r+');  
text(real(z2)+0.5, imag(z2), 'z2');
```



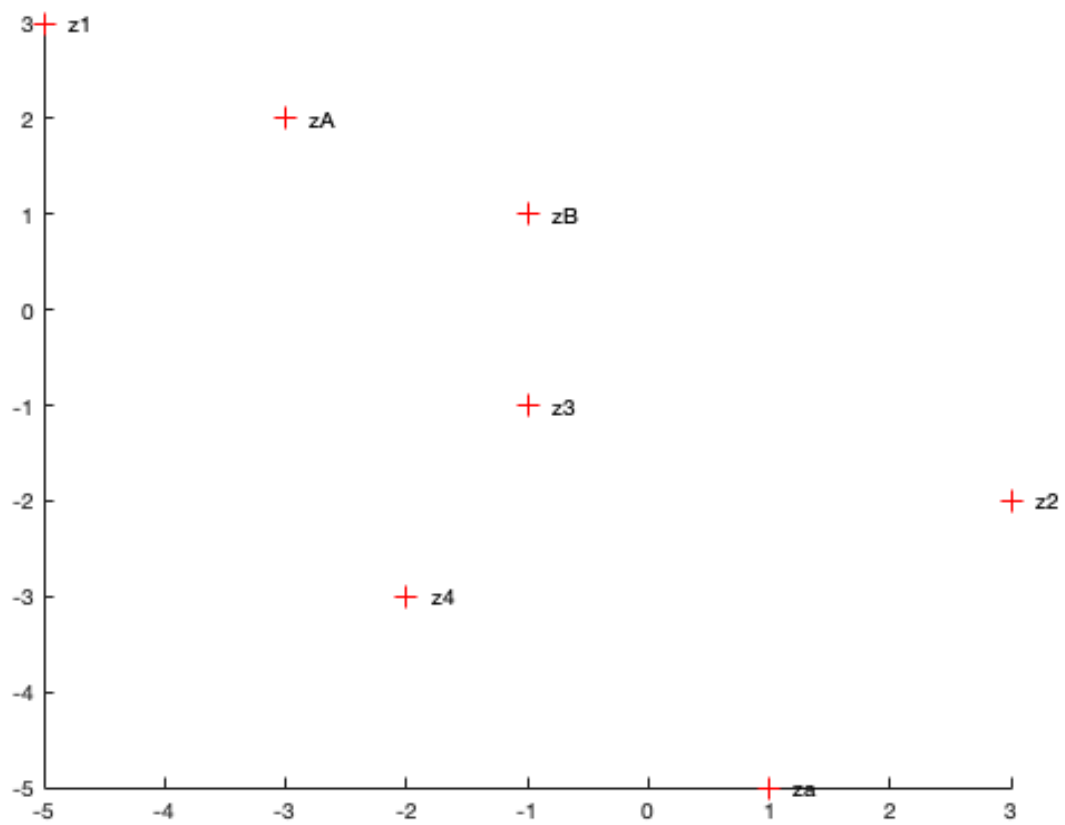
```
plot(z3, 'r+');  
text(real(z3)+os, imag(z3), 'z3');
```



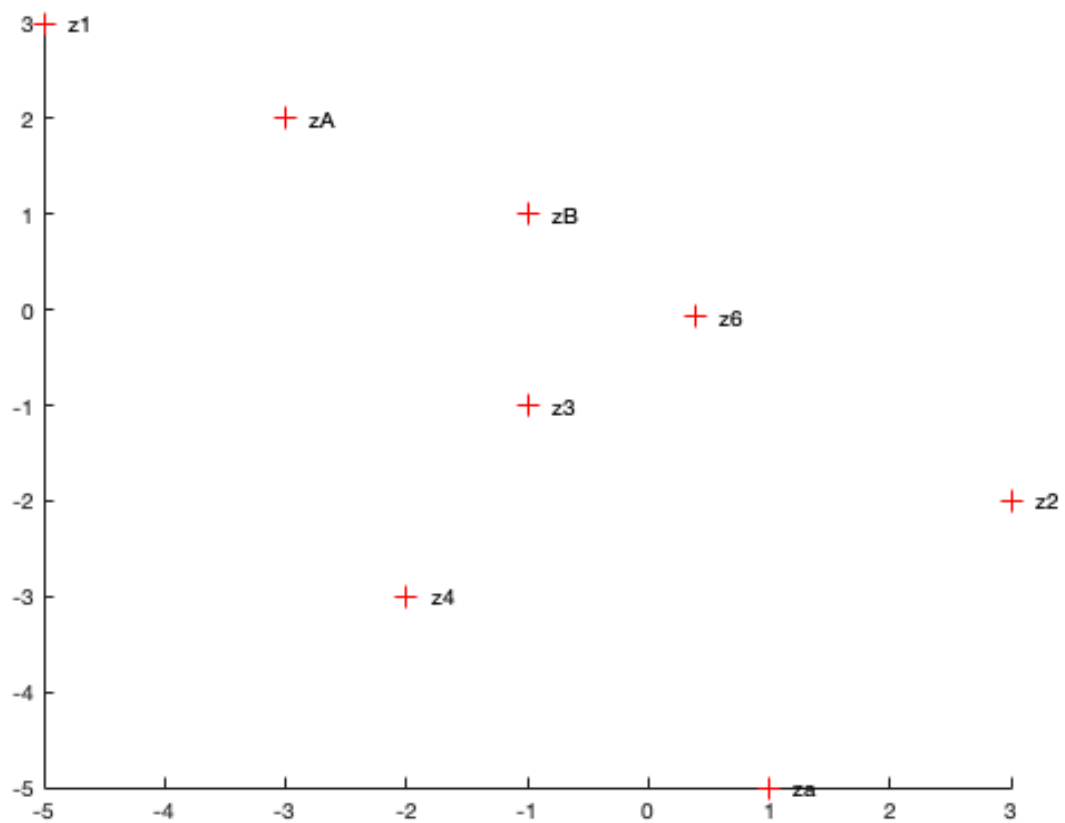
```
plot(z4, 'r+');  
text(real(z4)+os, imag(z4), 'z4');
```



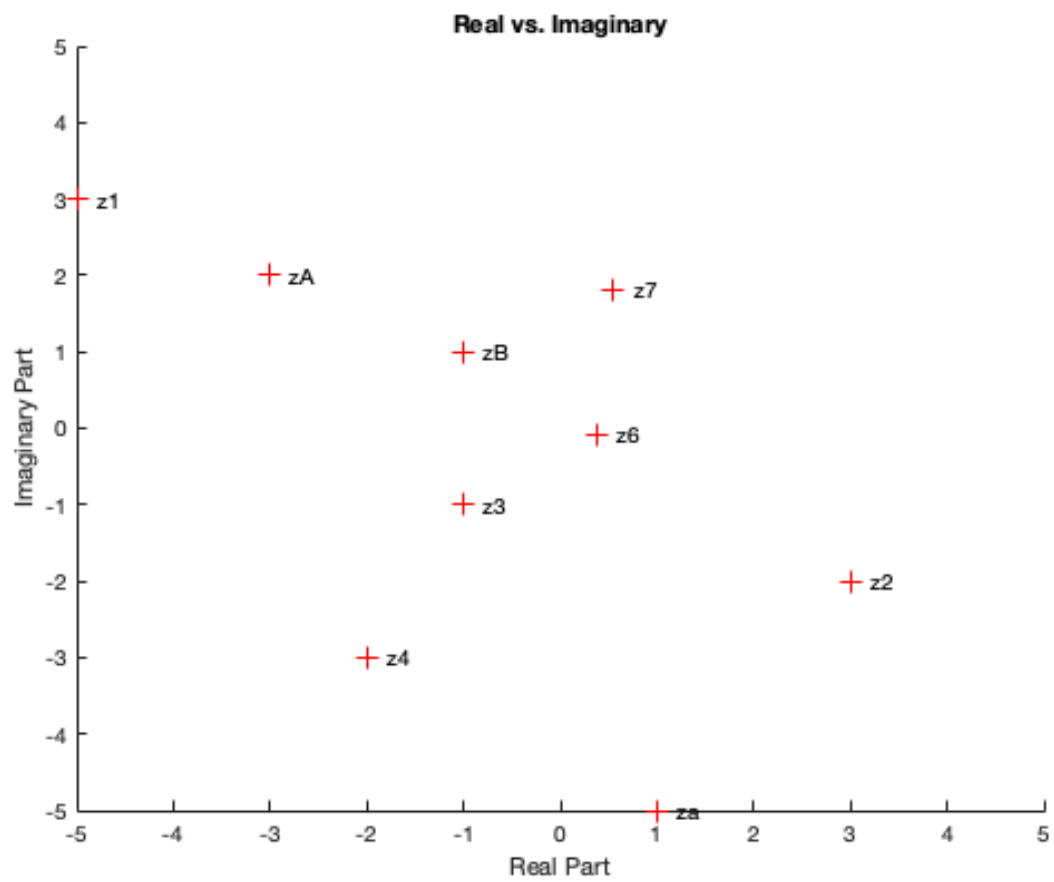
```
plot(z5, 'r+');  
text(real(z5)+os, imag(z5), 'za');
```

```
plot(z6, 'r+');  
text(real(z6)+0.5, imag(z6), 'z6');
```



```
plot(z7, 'r+');  
text(real(z7)+0.5, imag(z7), 'z7');  
  
%Scale the two axes  
axis([-5 5 -5 5]);  
  
%Label the axes and create the title  
xlabel('Real Part');  
ylabel('Imaginary Part');  
title('Real vs. Imaginary');
```



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