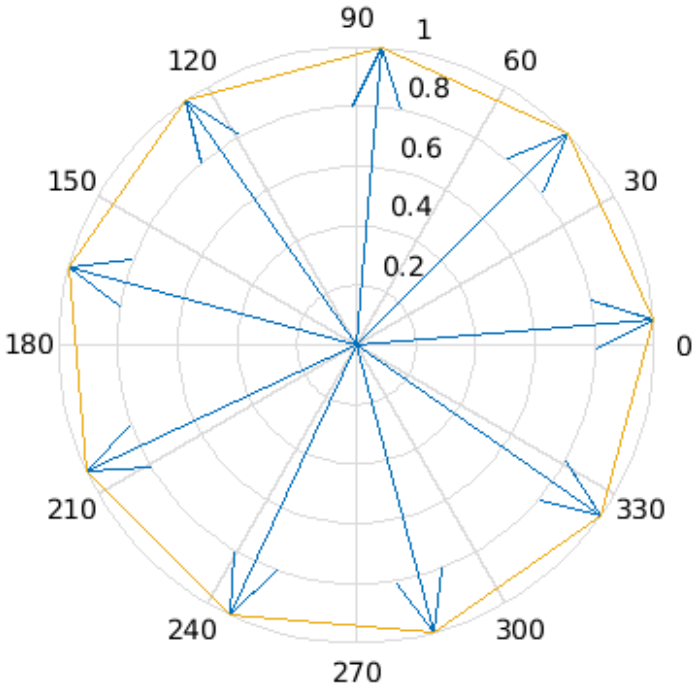
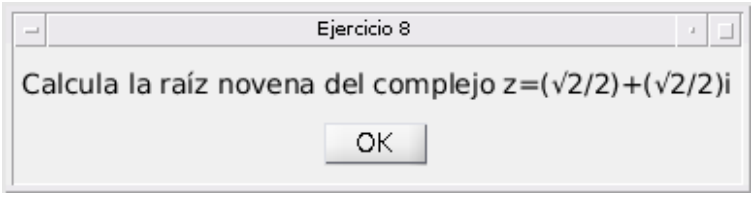
```
%Ejercicio 8%
%Calcula la raíz novena de z%
m=msgbox('Calcula la raíz novena del complejo
 z=(#2/2)+(#2/2)i','Ejercicio 8');

%valores%
m2='Valores a tomar en cuenta';
z=((sqrt(2))/2)+((sqrt(2))/2)*1i
arg=angle(z)
r=abs(z)
n=9

%Cálculo de resultados%
m3='Cálculos';
k=0;
z0=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=1;
z1=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=2;
z2=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=3;
z3=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=4;
z4=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=5;
z5=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=6;
z6=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=7;
z7=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

k=8;
z8=r^(1/n)*exp((arg+2*k*pi)/(n)*1i)

%Comprobación%
Cz0=z0^9
Cz1=z1^9
Cz2=z2^9
Cz3=z3^9
Cz4=z4^9
Cz5=z5^9
Cz6=z6^9
Cz7=z7^9
Cz8=z8^9
```

```
%Graficación%
m4='Gráfica';
compass([z0,z1,z2,z3,z4,z5,z6,z7,z8])

hold on;
plot([z0,z1,z2,z3,z4,z5,z6,z7,z8,z0])


z =

   0.7071 + 0.7071i


arg =

    0.7854


r =

     1


n =

     9


z0 =

   0.9962 + 0.0872i


z1 =

   0.7071 + 0.7071i


z2 =

   0.0872 + 0.9962i


z3 =

  -0.5736 + 0.8192i


z4 =

  -0.9659 + 0.2588i


z5 =
```

```
  -0.9063 - 0.4226i

z6 =

  -0.4226 - 0.9063i

z7 =

   0.2588 - 0.9659i

z8 =

   0.8192 - 0.5736i

Cz0 =

   0.7071 + 0.7071i

Cz1 =

   0.7071 + 0.7071i

Cz2 =

   0.7071 + 0.7071i

Cz3 =

   0.7071 + 0.7071i

Cz4 =

   0.7071 + 0.7071i

Cz5 =

   0.7071 + 0.7071i

Cz6 =

   0.7071 + 0.7071i
```

```
Cz7 =

   0.7071 + 0.7071i

Cz8 =

   0.7071 + 0.7071i
```





Published with MATLAB® R2021a