
```
%Ejercicio 10%
%Calcula la raíz sexta de z%
m=msgbox('Calcula la raíz sexta del complejo
z=3*(cos(135°)+1i*sin(135°))','Ejercicio 10');

%valores%
m2='Valores a tomar en cuenta';
z=3*(cos(pi*3/4)+1i*sin(pi*3/4))
arg=angle(z)
r=abs(z)
n=6

%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)

%Comprobación%
Cz0=z0^6
Cz1=z1^6
Cz2=z2^6
Cz3=z3^6
Cz4=z4^6
Cz5=z5^6

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

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

z =

-2.1213 + 2.1213i
```

$arg =$

2.3562

$r =$

3

$n =$

6

$z0 =$

$1.1095 + 0.4596i$

$z1 =$

$0.1568 + 1.1907i$

$z2 =$

$-0.9528 + 0.7311i$

$z3 =$

$-1.1095 - 0.4596i$

$z4 =$

$-0.1568 - 1.1907i$

$z5 =$

$0.9528 - 0.7311i$

$Cz0 =$

$-2.1213 + 2.1213i$

$Cz1 =$

$-2.1213 + 2.1213i$

$Cz2 =$

$$-2.1213 + 2.1213i$$

$Cz3 =$

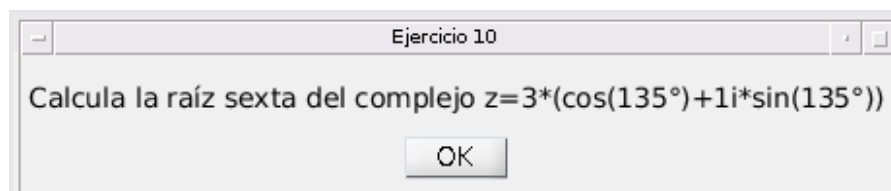
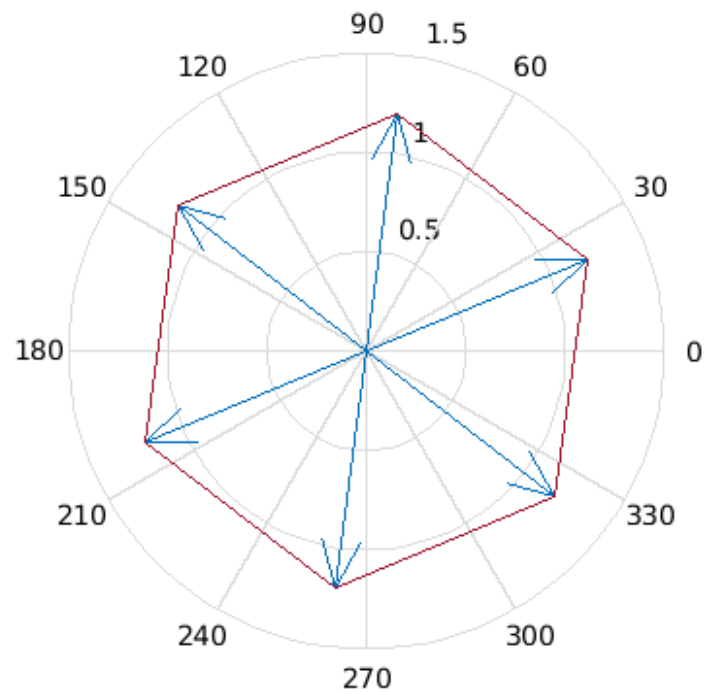
$$-2.1213 + 2.1213i$$

$Cz4 =$

$$-2.1213 + 2.1213i$$

$Cz5 =$

$$-2.1213 + 2.1213i$$



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