

```
In[4]:= ClearAll["Global`*"]
```

[清除全部](#)

```
Ai = 0;
```

```
Bi = 1;
```

$$T[\theta] := \frac{1}{2} * \begin{pmatrix} 1 & 1 \\ 1 & -1 \end{pmatrix} \cdot \begin{pmatrix} e^{i\theta} & 0 \\ 0 & 1 \end{pmatrix} \cdot \begin{pmatrix} 1 & 1 \\ 1 & -1 \end{pmatrix}$$

$$Ao[\theta] := \left\{ T[\theta] \cdot \begin{pmatrix} Ai \\ Bi \end{pmatrix} \right\}[[1]][[1]][[1]]$$

$$Bo[\theta] := \left\{ T[\theta] \cdot \begin{pmatrix} Ai \\ Bi \end{pmatrix} \right\}[[1]][[2]][[1]]$$

```
Plot[{Abs[Ao[θ]], Re[Ao[θ]], Im[Ao[θ]], Abs[Bo[θ]], Re[Bo[θ]], Im[Bo[θ]]},
```

[绘图](#) [绝对值](#) [实部](#) [虚部](#) [绝对值](#) [实部](#) [虚部](#)

```
{θ, 0, 2 π}, PlotLegends → "Expressions ", AxesLabel → {θ},
```

[绘图的图例](#)

[坐标轴标签](#)

```
Ticks → {Range[0, 2 π, π/4], Range[-1, 1, 0.5]},
```

[刻度](#) [范围](#)

[范围](#)

```
GridLines → {Range[0, 2 π, π/4], Range[-1, 1, 0.5]}
```

[网格线](#)

[范围](#)

[范围](#)



```
In[12]:= Plot[{Abs[Ao[θ]], Re[Ao[θ]], Im[Ao[θ]]}, {θ, 0, 2 π}, PlotLegends → "Expressions ",
```

[绘图](#) [绝对值](#) [实部](#) [虚部](#) [绘图的图例](#)

```
AxesLabel → {θ}, Ticks → {Range[0, 2 π, π/4], Range[-1, 1, 0.5]},
```

[坐标轴标签](#)

[刻度](#)

[范围](#)

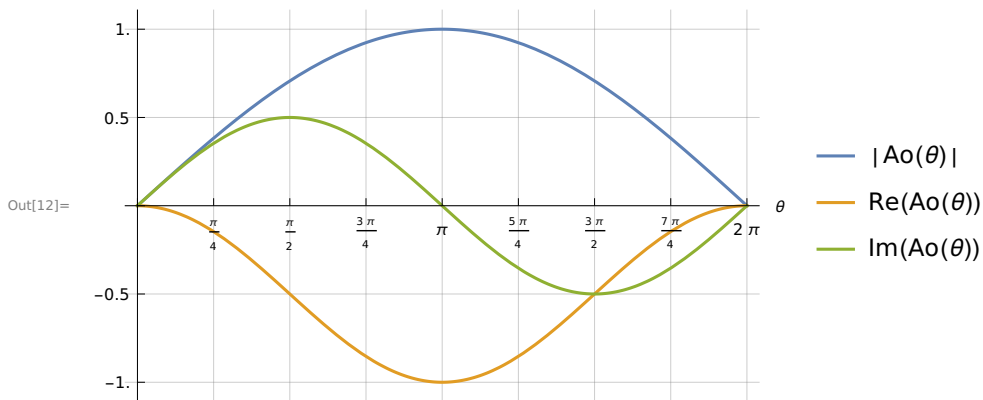
[范围](#)

```
GridLines → {Range[0, 2 π, π/4], Range[-1, 1, 0.5]}
```

[网格线](#)

[范围](#)

[范围](#)



```

In[13]:= Plot[{Abs[Bo[θ]], Re[Bo[θ]], Im[Bo[θ]]}, {θ, 0, 2 π}, PlotLegends → "Expressions ",
|绘图| |绝对值| |实部| |虚部| |绘图的图例|
  AxesLabel → {θ}, Ticks → {Range[0, 2 π, π/4], Range[-1, 1, 0.5]},
|坐标轴标签| |刻度| |范围| |范围|
  GridLines → {Range[0, 2 π, π/4], Range[-1, 1, 0.5]}
|网格线| |范围| |范围|

```

