

**Set**

|赋值

**DownValues**

|下值

**UpValues**

|上值

**Trace**

|追踪

**Evaluate**

|计算

*In[ ]:=*

**Manipulate[**

|交互式操作

**Show[PolyhedronData["Dodecahedron", "Graphics3D"],**

|显示 |多面体数据

|十二面体

|三维图形

**ViewPoint → {Cos[t], Sin[t], 0},**

|视点

|余弦

|正弦

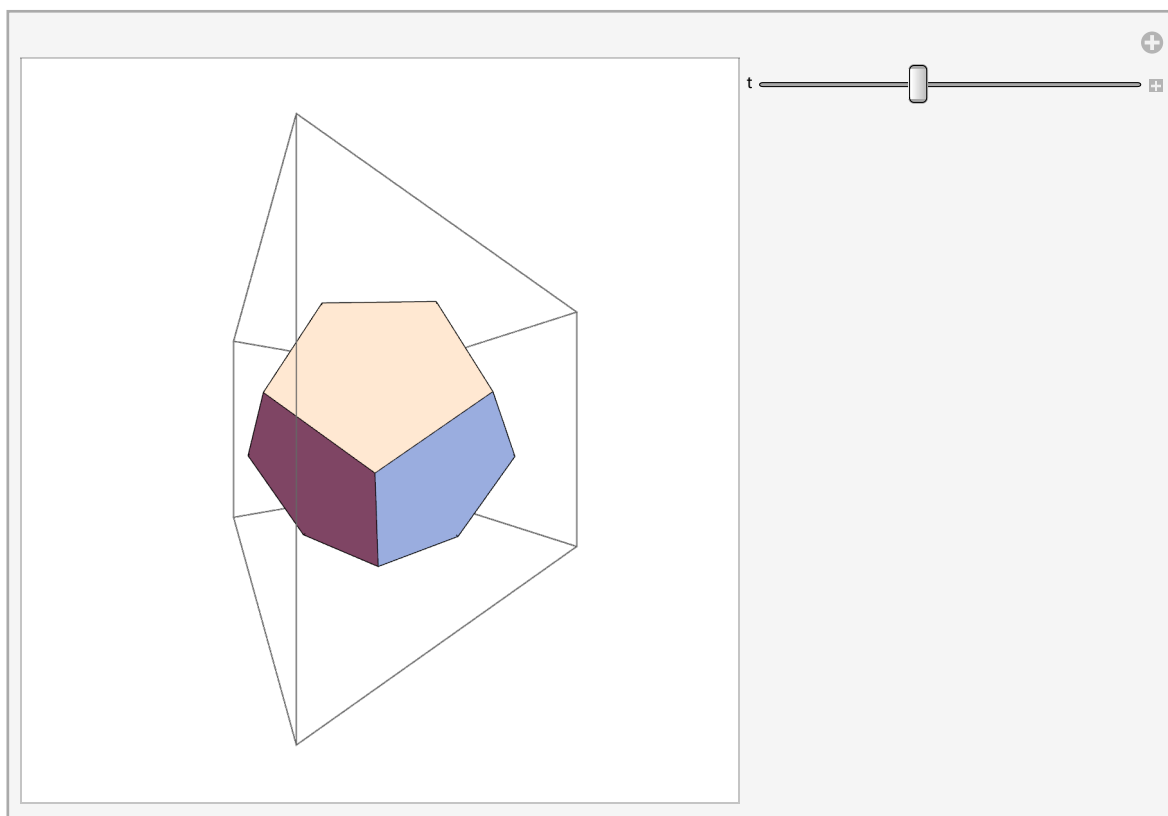
**SphericalRegion → True],**

|球面区域

|真

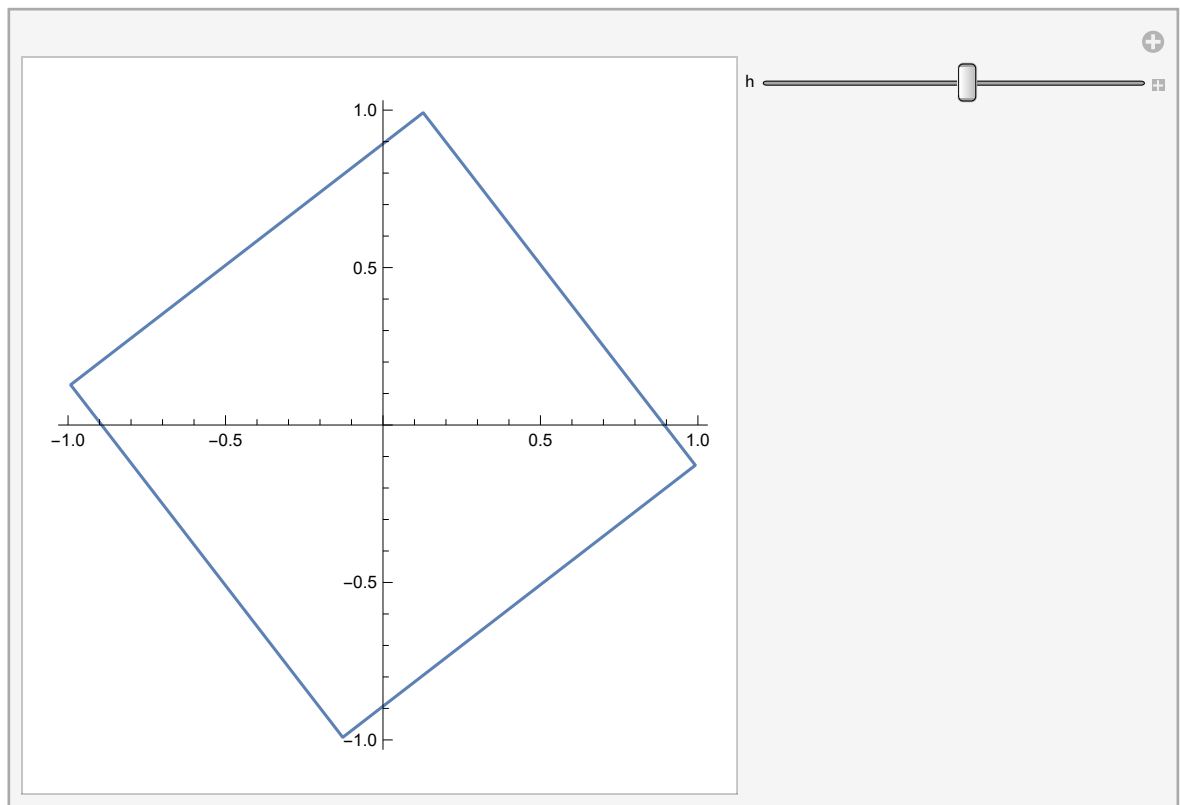
**{t, 0, 2  $\pi$ }]**

*Out[ ]:=*



In[ ]:= **Manipulate**[  
[交互式操作](#)  
**PolarPlot**[[极坐标图](#)  $\text{Cos}\left[\frac{\pi}{4}\right]$  [余弦](#)  $\text{Sec}\left[\frac{\pi}{4} - \text{Mod}\left[h + t, \frac{\pi}{2}\right]\right]$ , [正割](#) [模余](#)  $\{t, 0, 2\pi\}$ ,  
 $\{h, 0, \pi\}$

Out[ ]:=

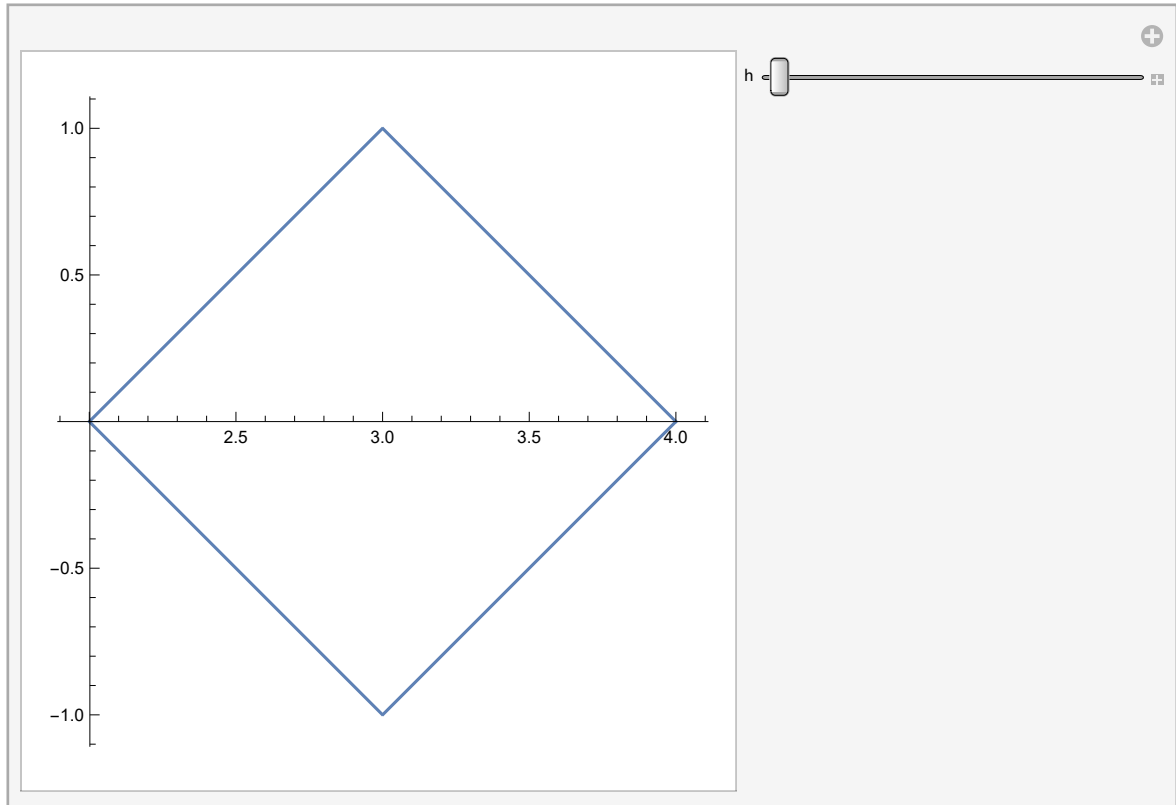


In[ ]:= **Manipulate**[  
[交互式操作](#)

**ParametricPlot**[[绘制参数图](#)  $\{ \text{Cos}[t], \text{Sin}[t] \}$  [余弦](#) [正弦](#)  $\text{Cos}\left[\frac{\pi}{4}\right]$  [余弦](#)  $\text{Sec}\left[\frac{\pi}{4} - \text{Mod}\left[h + t, \frac{\pi}{2}\right]\right]$  [正割](#) [模余](#)  $+ \{3, 0\}, \{t, 0, 2\pi\}$  ],

$\{h, 0, \pi\}$ ]

Out[ ]:=



In[ ]:= **CoordinateTransform**["Polar" → "Cartesian",  $\{ \text{Cos}[\pi/4] \text{Sec}[\pi/4 - \text{Mod}[t, \pi/2]] \}, t \}$ ]  
[坐标变换](#) [余弦](#) [正割](#) [模余](#)

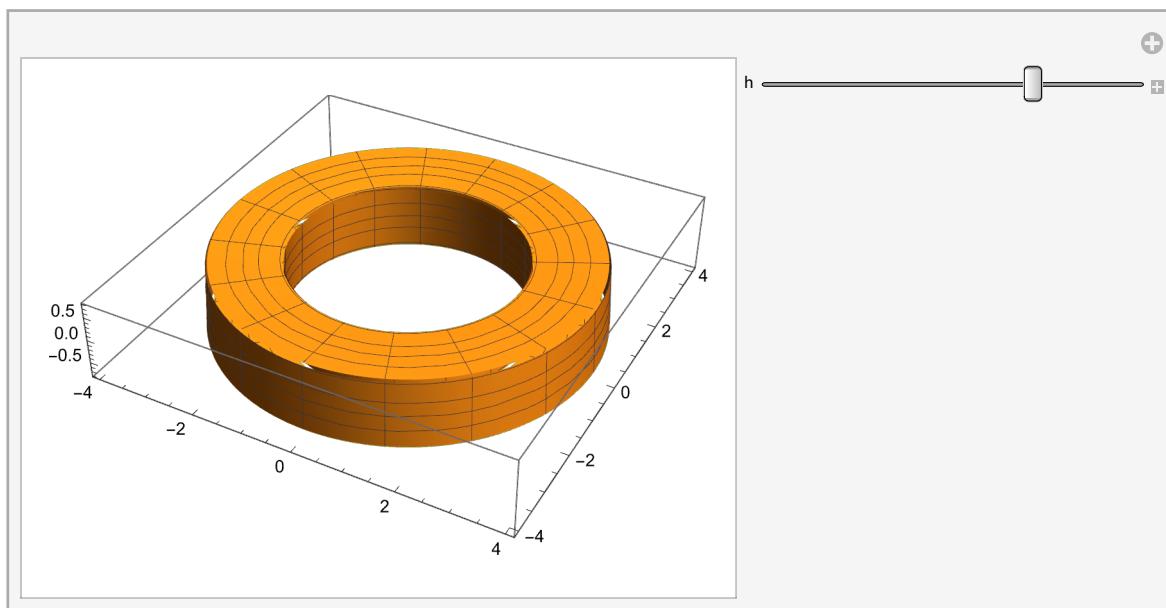
Out[ ]:=

$$\left\{ \frac{\text{Cos}[t] \text{Sec}\left[\frac{\pi}{4} - \text{Mod}\left[t, \frac{\pi}{2}\right]\right]}{\sqrt{2}}, \frac{\text{Sec}\left[\frac{\pi}{4} - \text{Mod}\left[t, \frac{\pi}{2}\right]\right] \text{Sin}[t]}{\sqrt{2}} \right\}$$

In[ ]:= **Manipulate**[  
[交互式操作](#)  
**RevolutionPlot3D**[  
[绘制三维旋转图](#)  

$$\left\{ \frac{\cos[t] \sec\left[\frac{\pi}{4} - \text{Mod}\left[h + t, \frac{\pi}{2}\right]\right]}{\sqrt{2}} + 3, \frac{\sec\left[\frac{\pi}{4} - \text{Mod}\left[h + t, \frac{\pi}{2}\right]\right] \sin[t]}{\sqrt{2}} \right\}, \{t, 0, 2\pi\},$$
  
 $\{h, 0, \pi\}$

Out[ ]:=

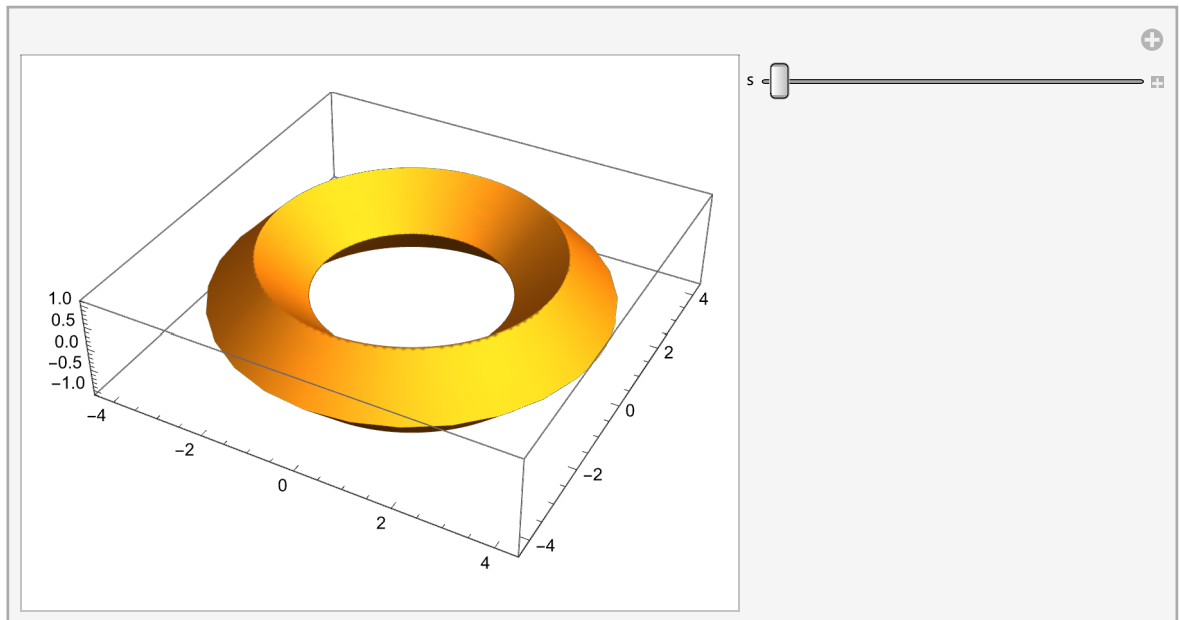


`In[*]:= Manipulate[`  
[交互式操作](#)  
`ParametricPlot3D[`  
[绘制三维参数图](#)  

$$x = \frac{\cos[v] \sec\left[\frac{\pi}{4} - \text{Mod}\left[s u + v, \frac{\pi}{2}\right]\right]}{\sqrt{2}} + 3;$$

$$y = \frac{\sec\left[\frac{\pi}{4} - \text{Mod}\left[s u + v, \frac{\pi}{2}\right]\right] \sin[v]}{\sqrt{2}};$$
`{x Cos[u], x Sin[u], y},`  
[余弦](#) [正弦](#)  
`{u, 0, 2 π}, {v, 0, 2 π},`  
`Mesh → None, MaxRecursion → 5],`  
[网格](#) [无](#) [最大递归](#)  
`{s, 0, 3}]`

`Out[*]=`



```

In[ ]:= Manipulate[
  ParametricPlot3D[
    x = Abs[Cos[v + s u]]2/n Sign[Cos[v + s u]] + 3;
    y = Abs[Sin[v + s u]]2/n Sign[Sin[v + s u]];
    {x Cos[u], x Sin[u], y},
    {u, 0, 2 π}, {v, 0, 2 π},
    Mesh → None, MaxRecursion → 5],
  {s, 0, 3}, {n, 1, 4, 1}]

```

Out[ ]:=

