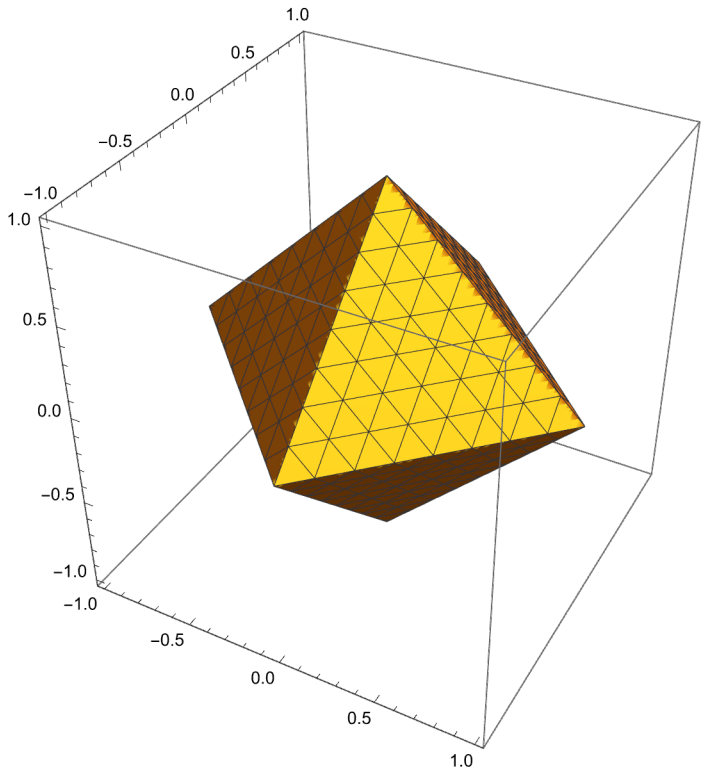
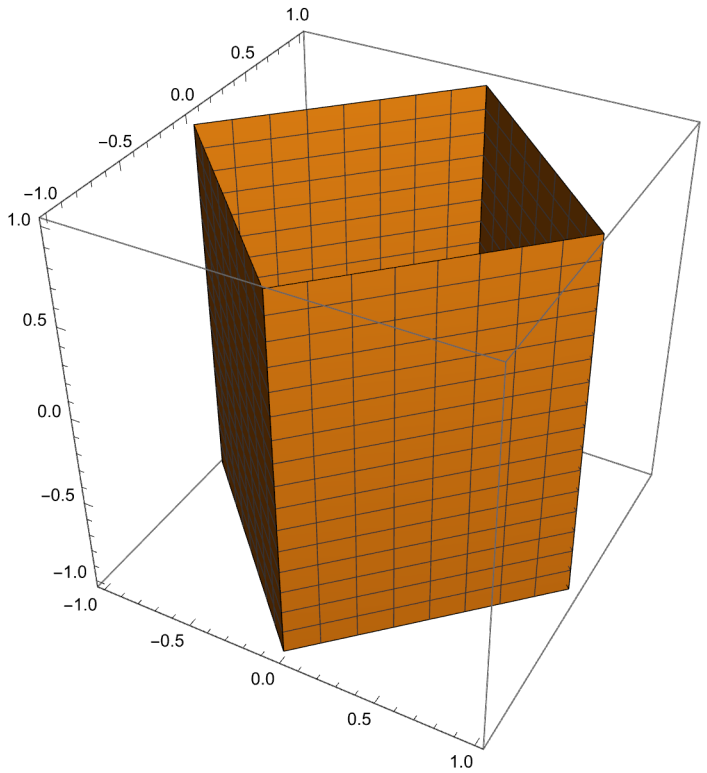
In[ ]:=
```
ContourPlot3D[Abs[x] + Abs[y] + Abs[z] == 1, {x, -1, 1}, {y, -1, 1}, {z, -1, 1}]
```
三维等高线 绝对值 绝对值 绝对值

Out[ ]=



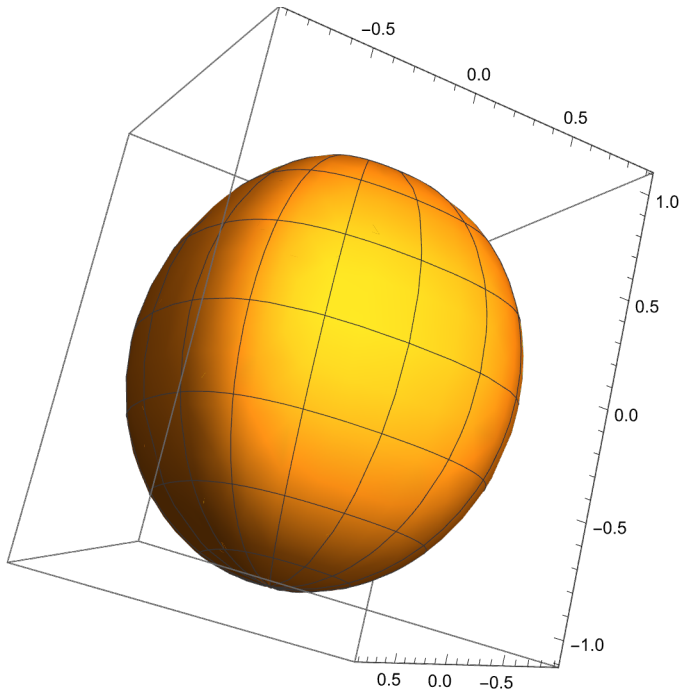
In[ ]:=
```
ContourPlot3D[Abs[x] + Abs[y] == 1, {x, -1, 1}, {y, -1, 1}, {z, -1, 1}]
```
三维等高线 绝对值 绝对值

Out[ ]=



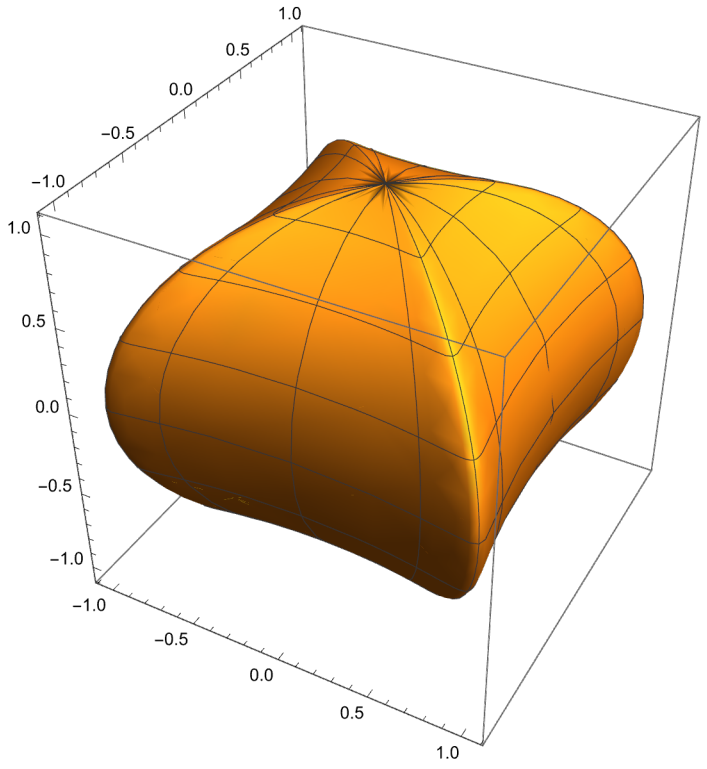
In[ ]:=
```
ParametricPlot3D[
绘制三维参数图
  {Cos[y] Sin[Cos[t]], Cos[y] Sin[Sin[t]], Sin[y]}, {t, 0, 2 π}, {y, 0, 2 π}]
  余弦  正弦 余弦  余弦  正弦 正弦  正弦
```

Out[ ]=



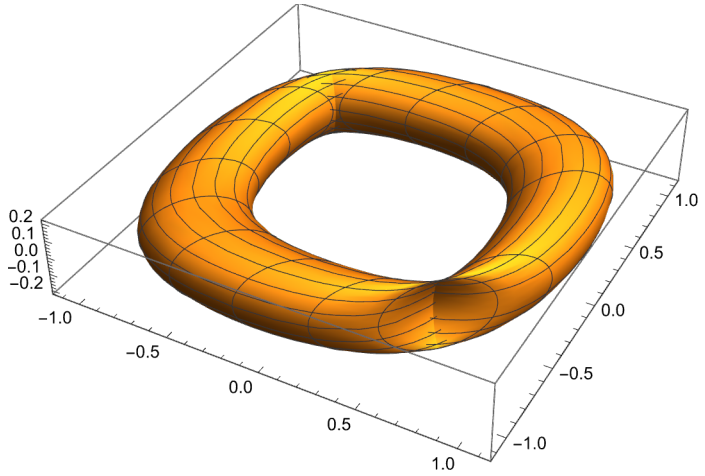
In[ ]:=
```
ParametricPlot3D[
绘制三维参数图
  {Cos[y] Sin[2 Cos[t]], Cos[y] Sin[2 Sin[t]], Sin[y]}, {t, 0, 2 π}, {y, 0, 2 π}]
  余弦  正弦 余弦  余弦  正弦 正弦  正弦
```

Out[ ]=



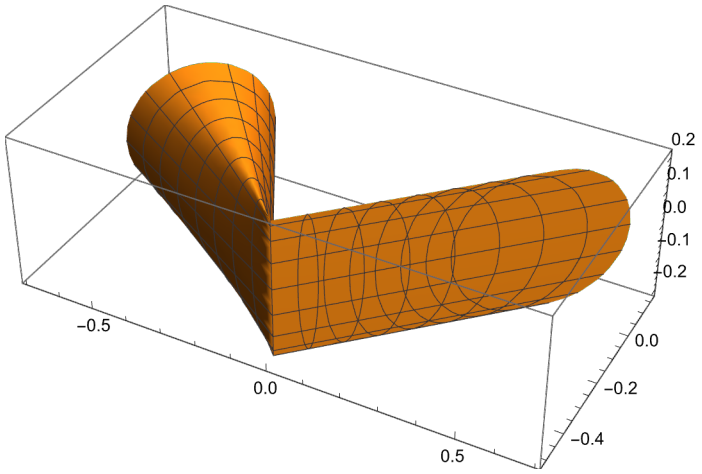
In[ ]:=
```
ParametricPlot3D[{0.2 Cos[y] + Sin[Cos[t]], 0.2 Cos[y] + Sin[Sin[t]],
  0.2 Sin[y]}, {t, 0, 2 π}, {y, 0, 2 π}]
```
绘制三维参数图 余弦 正弦 余弦 余弦 正弦 正弦 正弦

Out[ ]=



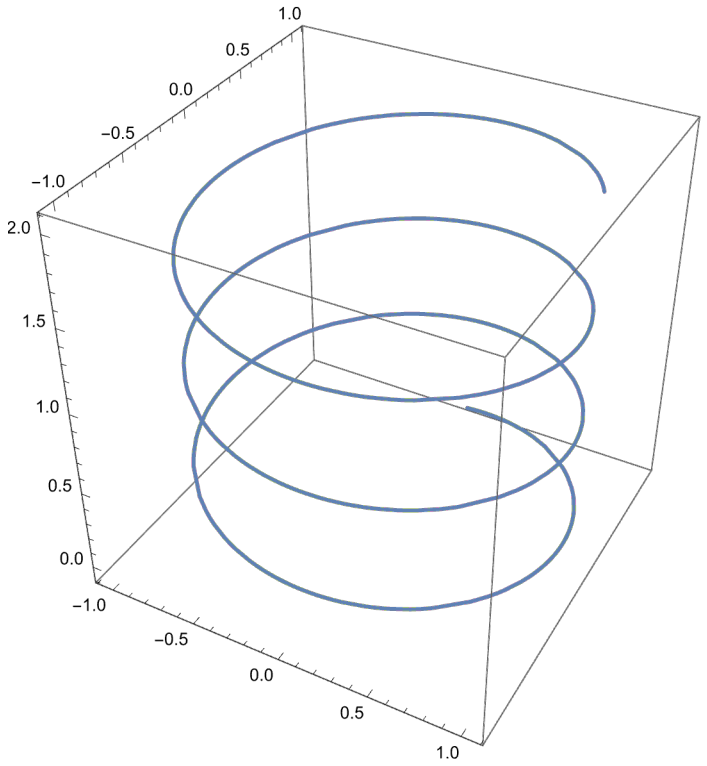
In[ ]:=
```
ParametricPlot3D[{{t + 0.2 Sin[v] √2 t, Abs[t] - 0.5 + 0.2 Sin[v] √2 t, 0.2 Cos[v]}},
  {t, -0.5, 0.5}, {v, 0, 2 π}]
```
绘制三维参数图 正弦 绝对值 正弦 余弦

Out[ ]=



In[ ]:=
```
ParametricPlot3D[{Sin[u], Cos[u], u / 10}, {u, 0, 20}]
```
绘制三维参数图 正弦 余弦

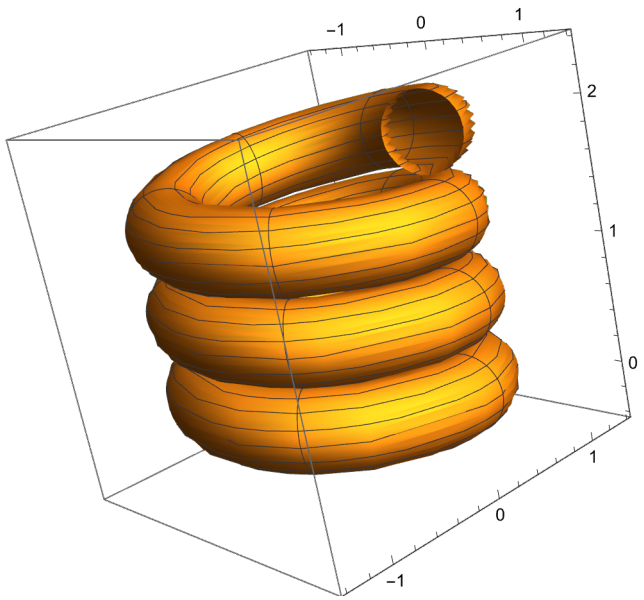
Out[ ]=



In[ ]:=
```
a = 0.3;
```

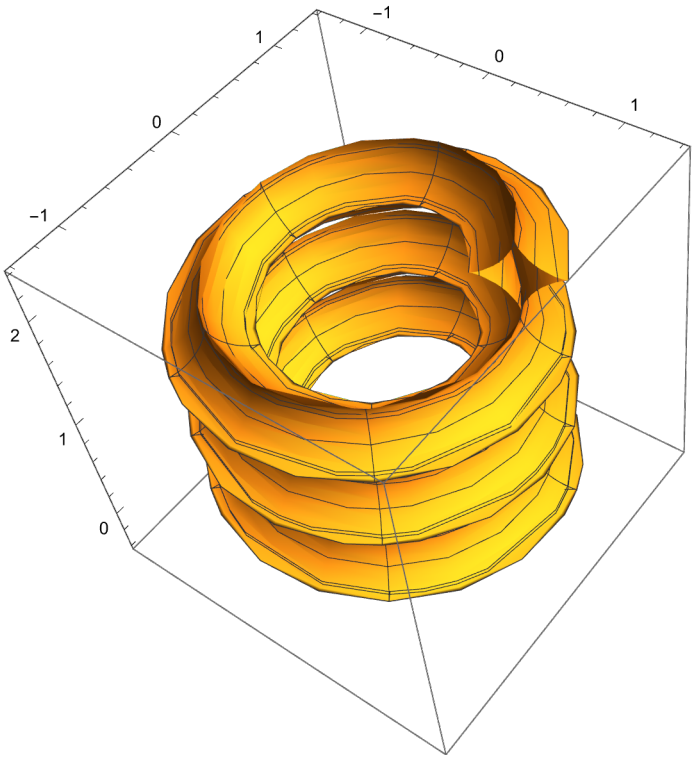
```
ParametricPlot3D[
```
绘制三维参数图
```
 {(1 + a Sin[v]) Sin[u], (1 + a Sin[v]) Cos[u], a Cos[v] + u / 10}, {u, 0, 20}, {v, 0, 2 π}]
```
正弦 正弦 正弦 余弦 余弦

Out[ ]=



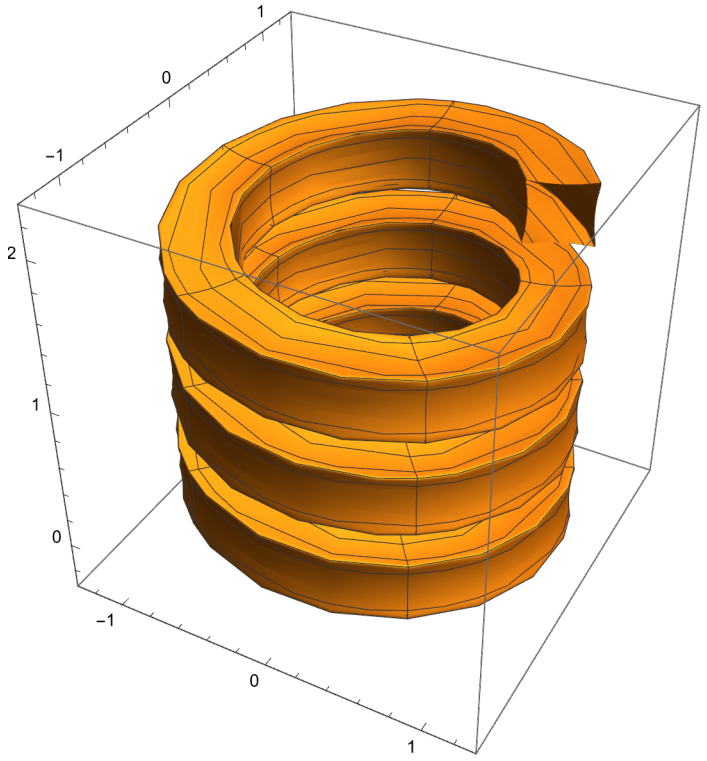
In[ ]:=
```
ParametricPlot3D[
绘制三维参数图
  {(1 + a Sin[v]^3) Sin[u], (1 + a Sin[v]^3) Cos[u], a Cos[v]^3 + u / 10}, {u, 0, 20}, {v, 0, 2 π}]
                 正弦                  余弦
```

Out[ ]=



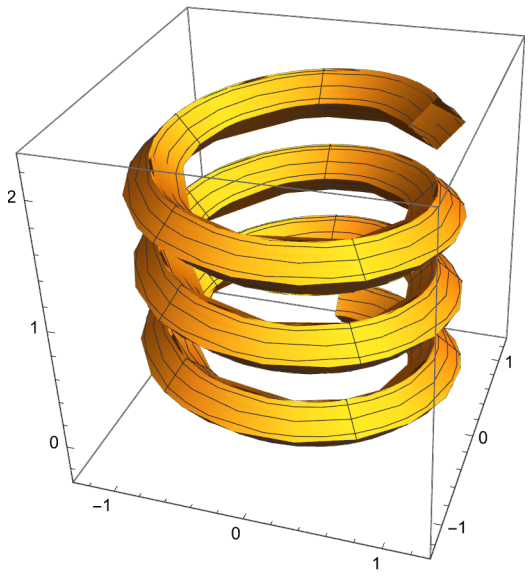
In[ ]:=
```
ParametricPlot3D[{(1 + 0.2 Sin[2 Cos[t]]) Sin[u],
(1 + 0.2 Sin[2 Cos[t]]) Cos[u], 0.2 Sin[2 Sin[t]] + u / 10}, {u, 0, 20}, {t, 0, 2 π}]
```
绘制三维参数图 正弦 余弦 正弦 正弦 余弦 余弦 正弦 正弦

Out[ ]=



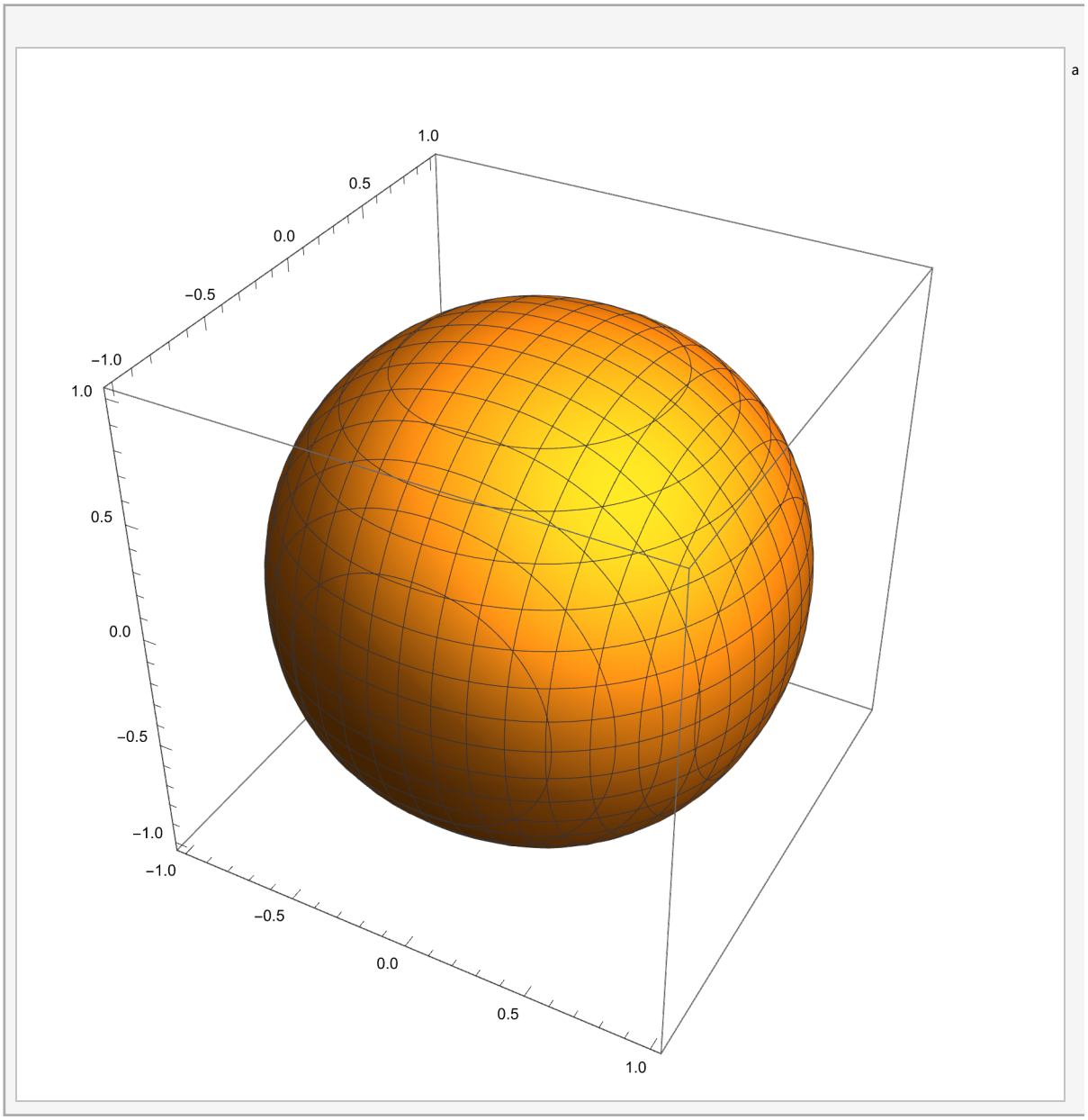
In[ ]:=
```
ParametricPlot3D[
{(1 + 0.2 Abs[Cos[t]]^2 Sign[Cos[t]]) Sin[u], (1 + 0.2 Abs[Cos[t]]^2 Sign[Cos[t]]) Cos[u],
0.2 Abs[Sin[t]]^2 Sign[Sin[t]] + u / 10}, {u, 0, 20}, {t, 0, 2 π}]
```
绘制三维参数图 … 余弦 正弦 … 余弦 余弦 … 正弦

Out[ ]=



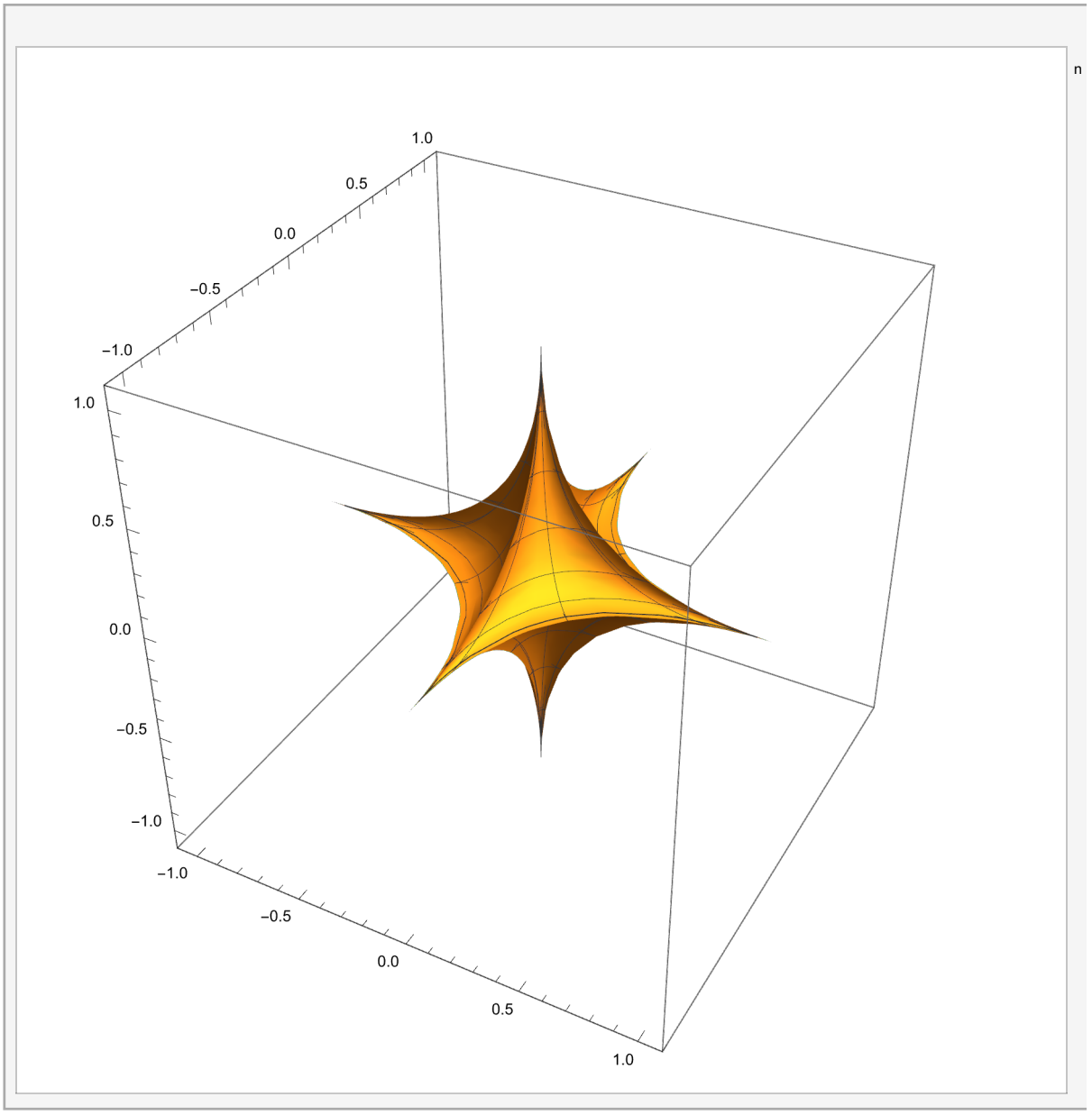
In[ ]:=
```
Manipulate[
 ContourPlot3D[Abs[x]^a + Abs[y]^a + Abs[z]^a == 1^a, {x, -1, 1}, {y, -1, 1}, {z, -1, 1},
  ImageSize → Large],
 {a, 0.5, 10}]
```
交互式操作 三维等高线 图像尺寸 大

Out[ ]=



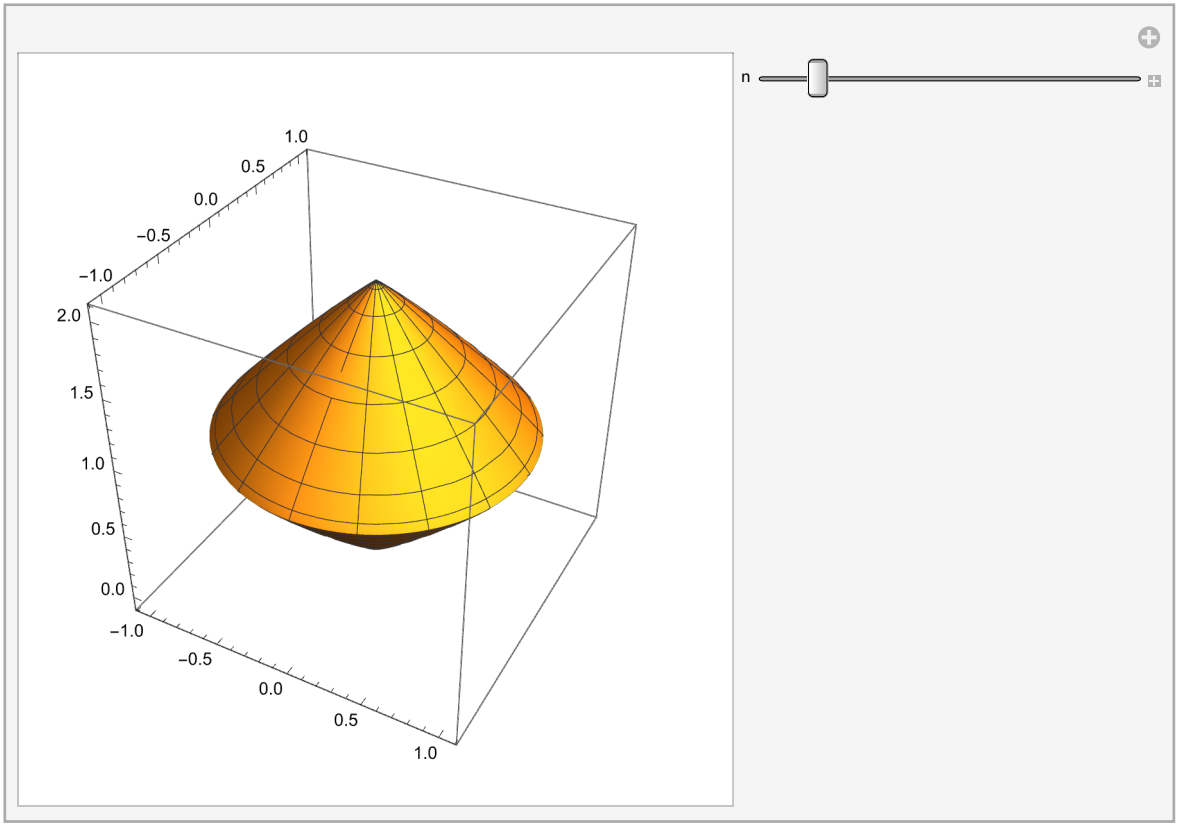
In[ ]:=
```
Manipulate[
 ParametricPlot3D[
  {Abs[Cos[u]]^(2/n) Sign[Cos[u]] Abs[Cos[v]]^(2/n),
   Abs[Sin[u]]^(2/n) Sign[Sin[u]] Abs[Cos[v]]^(2/n),
   Abs[Sin[v]]^(2/n) Sign[Sin[v]]}, {u, 0, 2 π}, {v, -π/2, π/2},
  ImageSize → Large, PlotRange → 1.1],
 {n, 0.5, 10}]
```
余弦 正弦 正弦 交互式操作 绘制三维参数图 图像尺寸 大 绘制范围

Out[ ]=



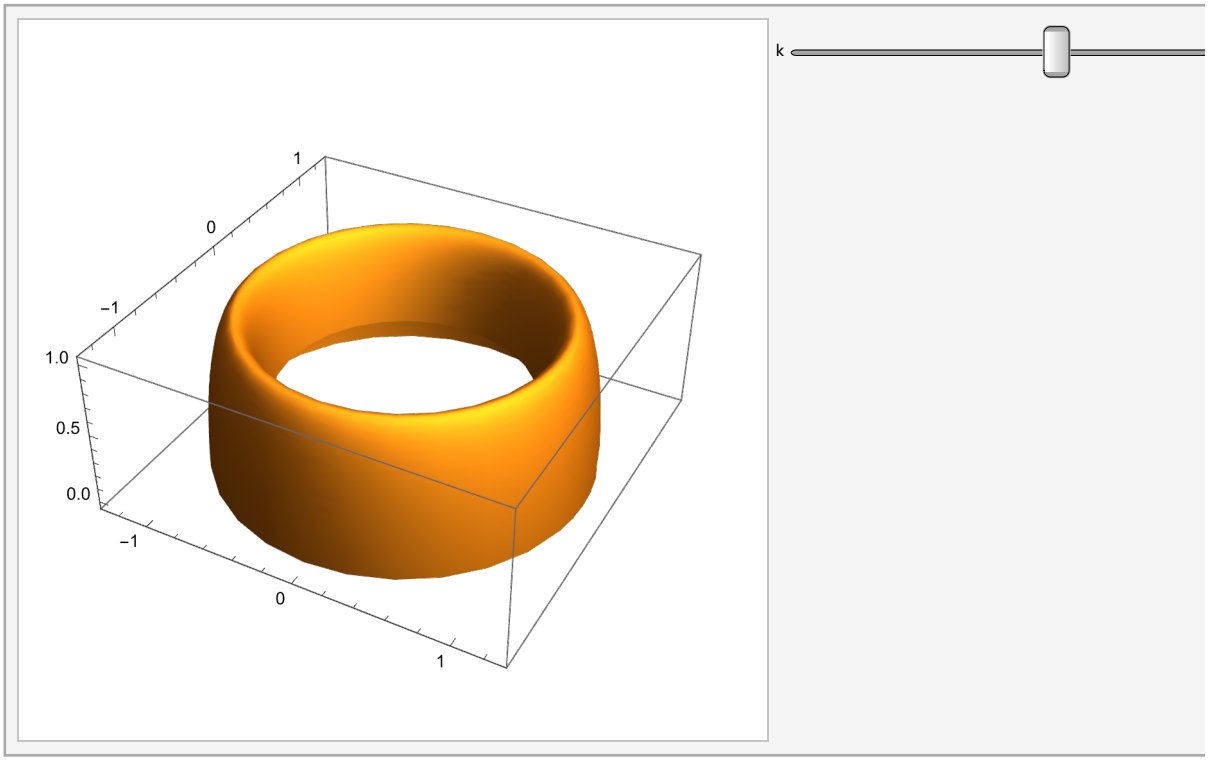
In[ ]:=
```
Manipulate[
  RevolutionPlot3D[{Abs[Cos[u]]^(2/n) Sign[Cos[u]],
    1 + Abs[Sin[u]]^(2/n) Sign[Sin[u]]}, {u, -π/2, π/2}],
  {n, 0.5, 5}]
```

Out[ ]=



In[ ]:=
```
Animate[ParametricPlot3D[{Cos[t] (1 + 0.2 Cos[v]),
  Sin[t] (1 + 0.2 Cos[v]),
  Sin[v]}, {t, 0, 2 π}, {v, 0, k},
 Mesh → None], {k, 0.01, 2 π}]
```
生成动画 绘制三维参数图 余弦 余弦 正弦 余弦 正弦 网格 无

Out[ ]=



In[ ]:=
```
RevolutionPlot3D[{Sin[t] + Sin[7 t] / 10, Cos[t] + Cos[7 t] / 10}, {t, 0, Pi}, Mesh → All]
```
绘制三维旋转图 正弦 正弦 余弦 余弦 … 网格 全部

Out[ ]=