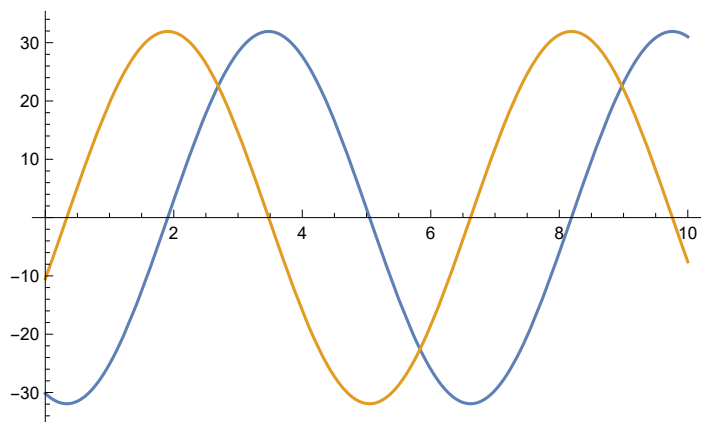


In[ ]:= sol = NDSolveValue[{y''[t] + y[t] == 0, y[2] == 3, y[8] == -6}, {y[t], y'[t]}, {t, 0, 10}];  
数值解的值

Plot[sol, {t, 0, 10}]

绘图

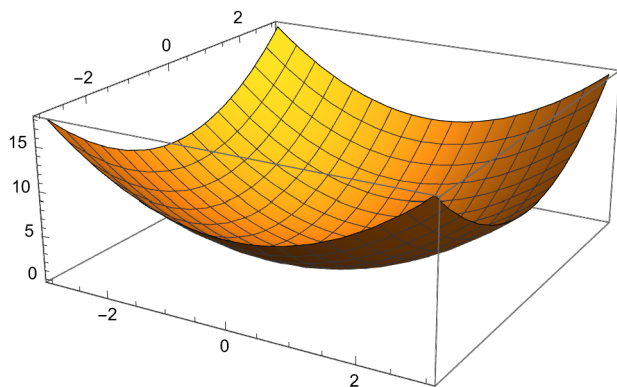
Out[ ]:=



In[ ]:= Plot3D[x<sup>2</sup> + y<sup>2</sup>, {x, -3, 3}, {y, -3, 3}]

绘制三维图形

Out[ ]:=



In[ ]:= Grad[x<sup>2</sup> + y<sup>2</sup>, {x, y}]

梯度

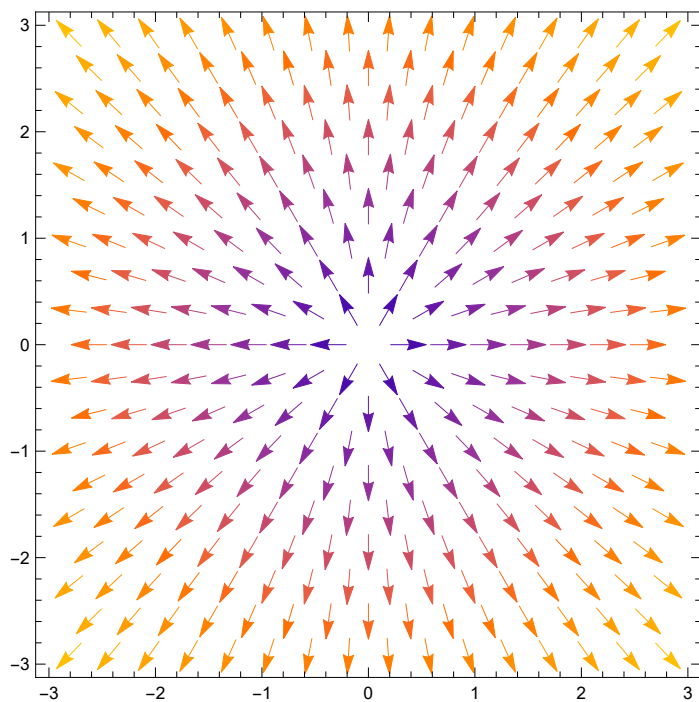
Out[ ]:=

{2 x, 2 y}

In[ ]:= **VectorPlot**[{2 x, 2 y}, {x, -3, 3}, {y, -3, 3}]

| 向量图

Out[ ]:=



In[ ]:= **Div**[{2 x, 2 y}, {x, y}]

| 散度

Out[ ]:=

4

In[ ]:= **Cur1**[{2 x, 2 y}, {x, y}]

| 旋度

Out[ ]:=

0

In[ ]:= **Laplacian**[x<sup>2</sup> + y<sup>2</sup>, {x, y}]

| 拉普拉斯算子

Out[ ]:=

4

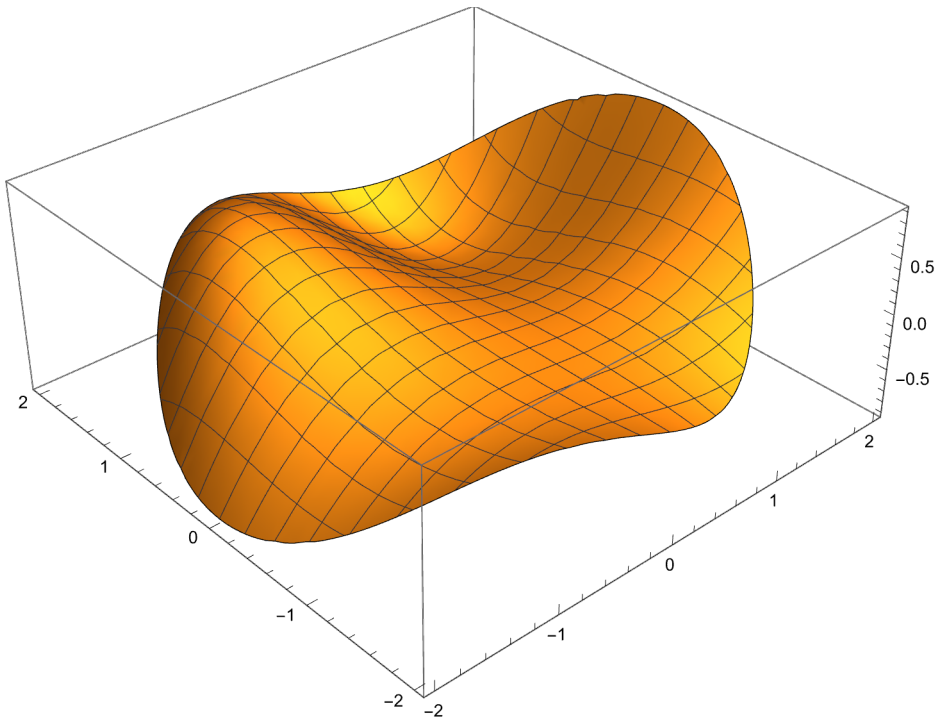
```

In[ ]:= sol1 = NDSolveValue[
  { $\nabla_{\{x,y\}}^2 f[x,y] + f[x,y] == x E^y$ , DirichletCondition[f[x,y] == Sin[x] Cos[y], True]},
  f[x,y], {x,y} ∈ Disk[{0,0}, 2];
Plot3D[sol1, {x, -2., 2.}, {y, -2., 2.}]

```

数值解的值  
狄里克雷条件  
正弦 余弦 真  
圆盘  
绘制三维图形

Out[ ]:=



```

In[ ]:= Plot3D[x E^y, {x, -2., 2.}, {y, -2., 2.}]

```

绘制三维图形

Out[ ]:=

