

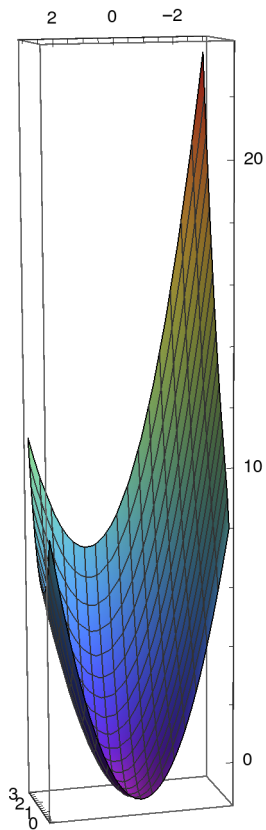
```
In[9]:= SetOptions[Plot3D(*Or whichever plot you desire*),  
        ColorFunction -> "Rainbow"(*One of many options*);  
        color[{x_, y_}] := Hue[(Pi + Arg[x + y I]) / (2 Pi)];
```

```
In[11]:= SetOptions[ContourPlot(*Or whichever plot you desire*),  
          ContourStyle -> {Red}(*One of many options*);  
SetOptions[ContourPlot3D(*Or whichever plot you desire*),  
          ColorFunction -> "Rainbow"(*One of many options*);  
          color[{x_, y_}] := Hue[(Pi + Arg[x + y I]) / (2 Pi)];
```

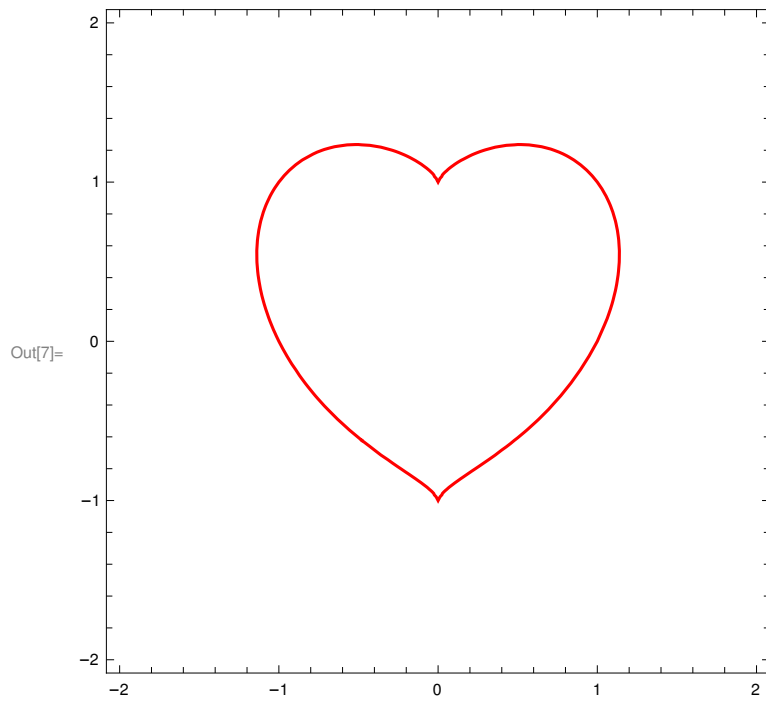
(\* Uvod \*)

```
In[14]:= Plot3D[{x2 + y2 - 1 - x^(2/3) * y}, {x, -3, 3}, {y, -3, 3}, BoxRatios -> Automatic]
```

Out[14]=

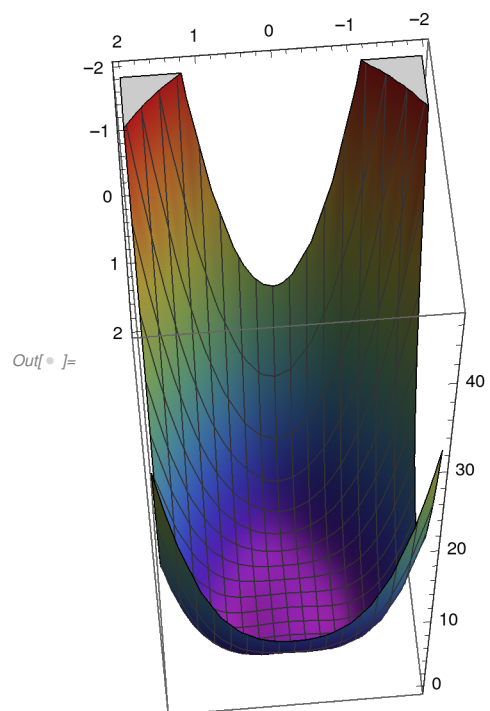


```
In[7]:= ContourPlot[x2 + y2 - 1 - (x2)(1/3) * y == 0, {x, -2, 2}, {y, -2, 2}]
```

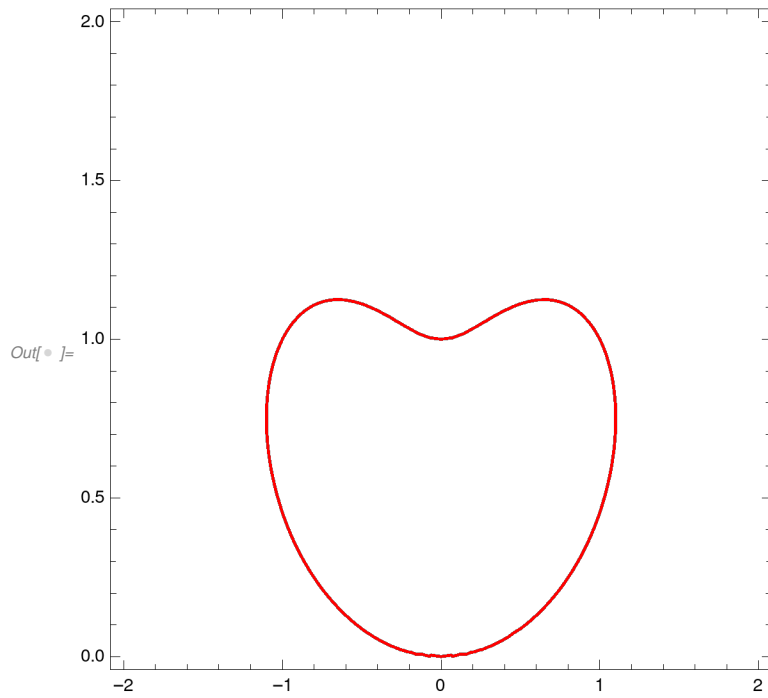


(\* 1 \*)

```
In[* ]:= Plot3D[{(x^2+y^2)^2-3 x^2 y-y^3}, {x, -2, 2}, {y, -2, 2}, BoxRatios -> {1, 1, 3}]
```

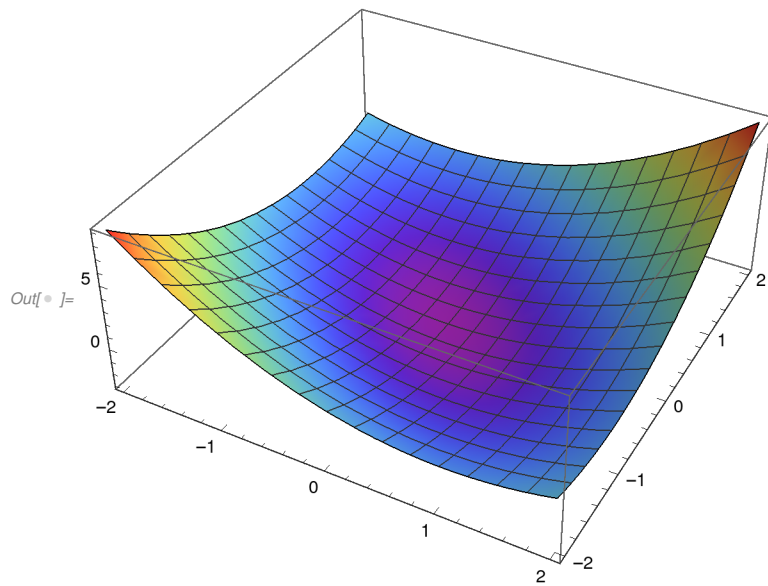


```
In[* ]:= ContourPlot[(x^2+y^2)^2-3x^2y-y^3==0, {x, -2, 2}, {y, 0, 2}]
```

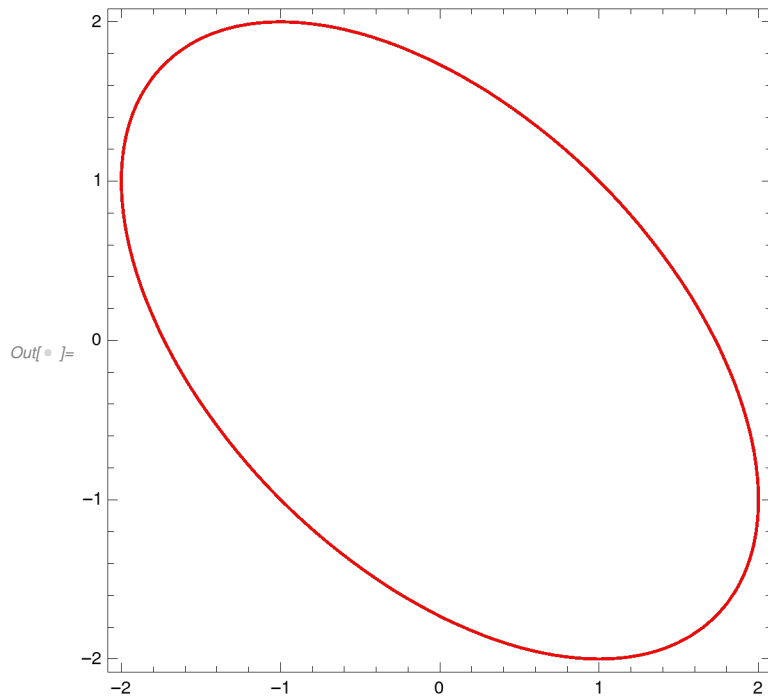


( \* 2 \* )

```
In[* ]:= Plot3D[{x^2+y^2+x*y-3}, {x, -2, 2}, {y, -2, 2}]
```



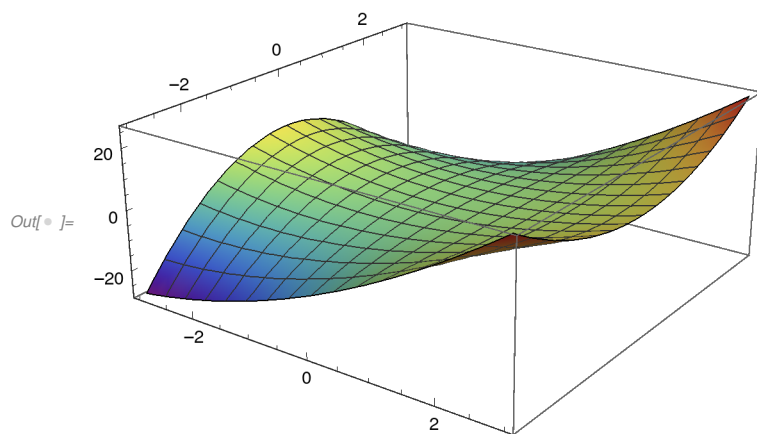
```
In[* ]:= ContourPlot[x^2+y^2+x*y-3==0, {x, -2, 2}, {y, -2, 2}]
```



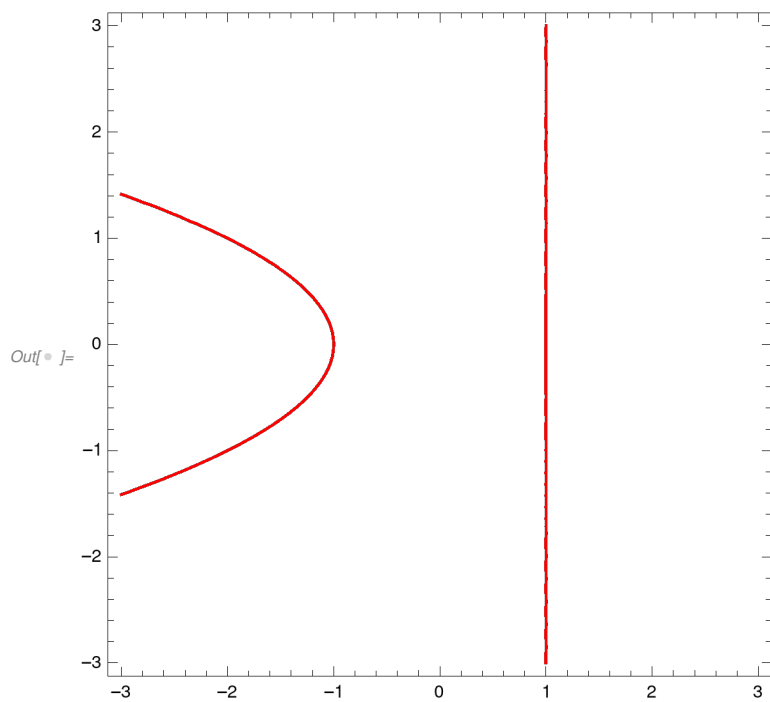
```
In[* ]:= (* 3 *)
```

```
p := x^2 + x*y^2 - y^2 - 1
```

```
In[* ]:= Plot3D[{p}, {x, -3, 3}, {y, -3, 3}]
```



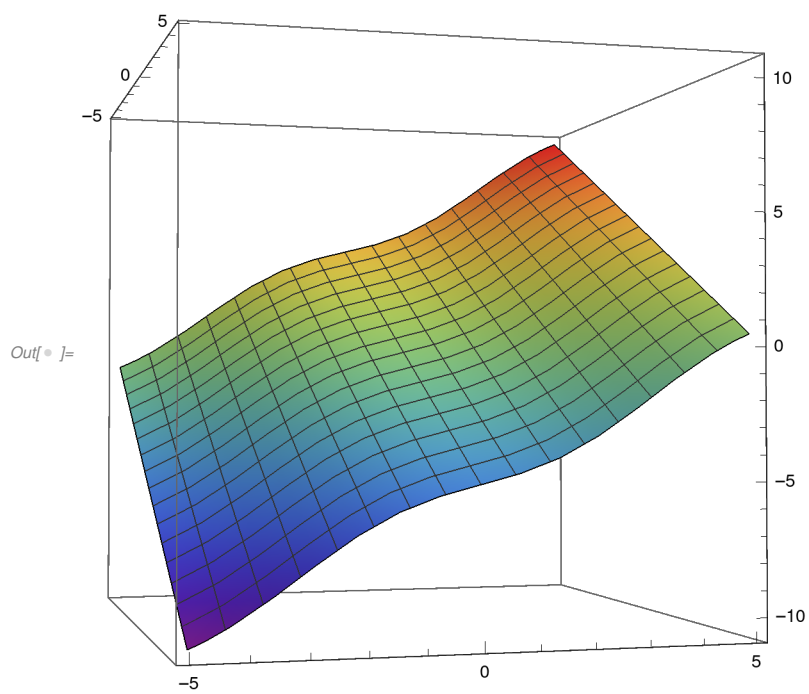
```
In[* ]:= ContourPlot[p == 0, {x, -3, 3}, {y, -3, 3}]
```



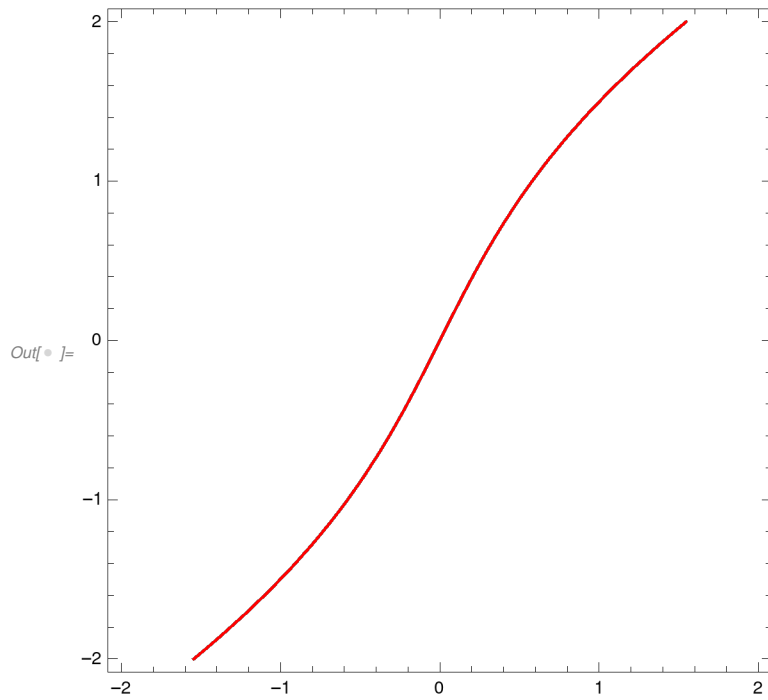
```
(* 4, 5 *)
```

```
p := y - 1/2 * Sin[y] - x
```

```
In[* ]:= Plot3D[{p}, {x, -5, 5}, {y, -5, 5}, BoxRatios -> {1, 1, 1}]
```



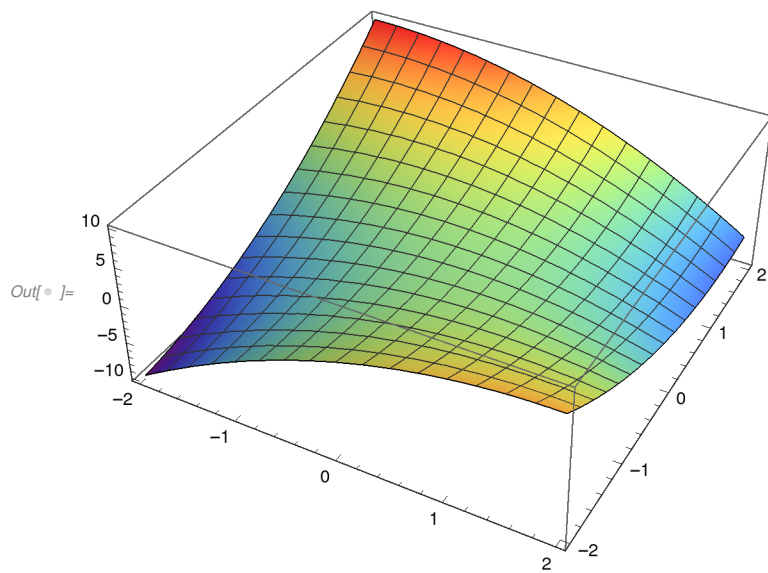
```
In[* ]:= ContourPlot[p == 0, {x, -2, 2}, {y, -2, 2}]
```



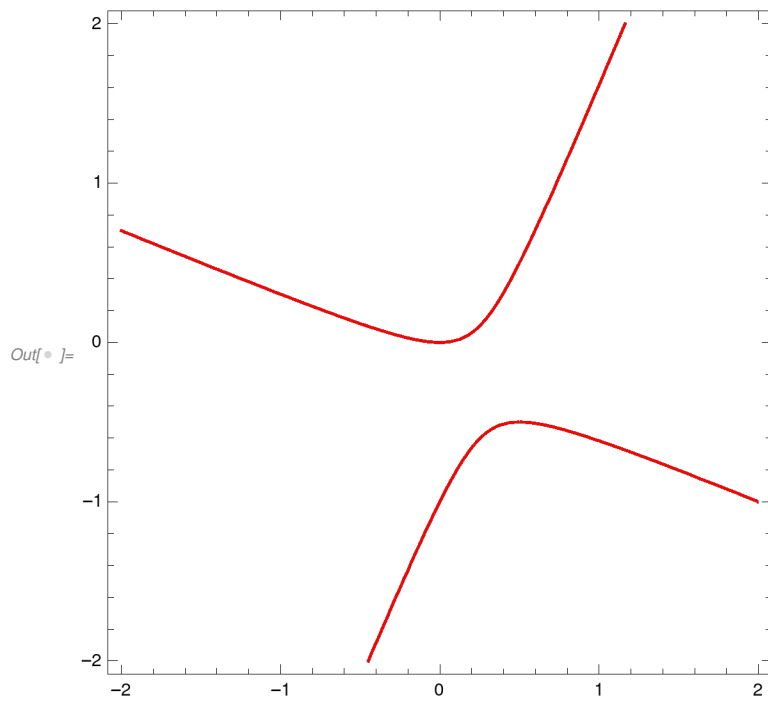
```
In[* ]:= (* 6 *)
```

```
p := -x^2 + y^2 - 2 x * y + y
```

```
In[* ]:= Plot3D[{p}, {x, -2, 2}, {y, -2, 2}]
```



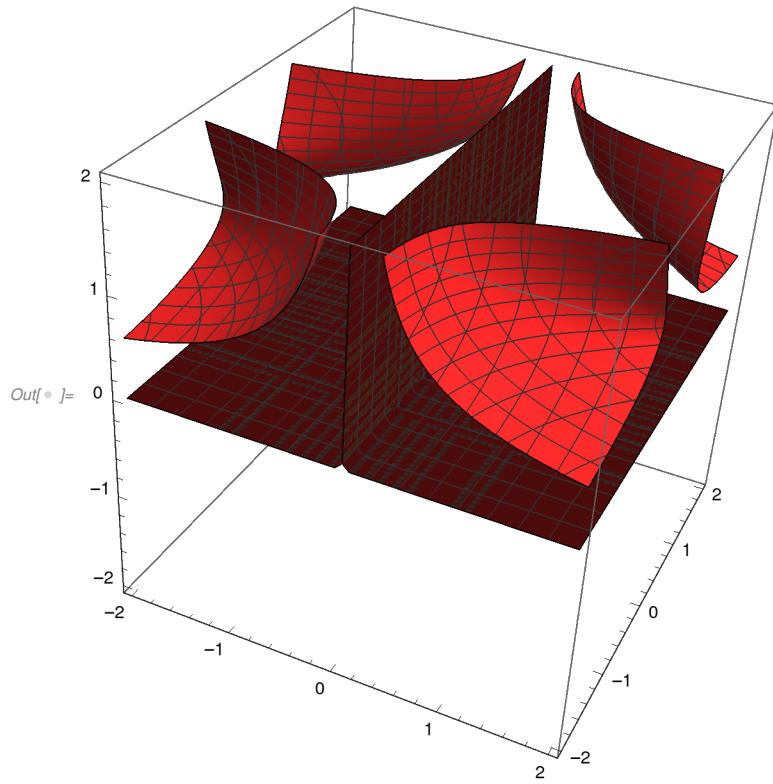
```
In[* ]:= ContourPlot[p == 0, {x, -2, 2}, {y, -2, 2}]
```



(\* 7 \*)

```
In[* ]:= ContourPlot3D[Log[x^2 * z^3] - Exp[z * Cos[y]] + 1 == 0, {x, -2, 2}, {y, -2, 2}, {z, -2, 2}]
```





In[ ] := (\* 8 \*)

**p := z + Exp[z] = x \* y + 2**

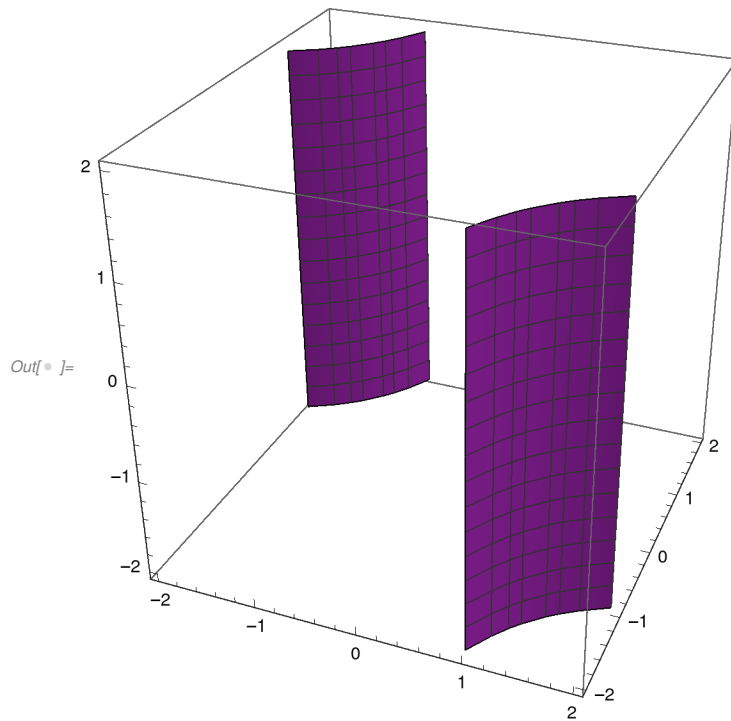
```
In[ ]:= ContourPlot3D[p == 0, {x, -2, 2}, {y, -2, 2}, {z, -2, 2}]
```

Set: Tag Plus in  $e^z + z$  is Protected.

Set: Tag Plus in  $e^z + z$  is Protected.

Set: Tag Plus in  $-1.99971 + 0.135374$  is Protected.

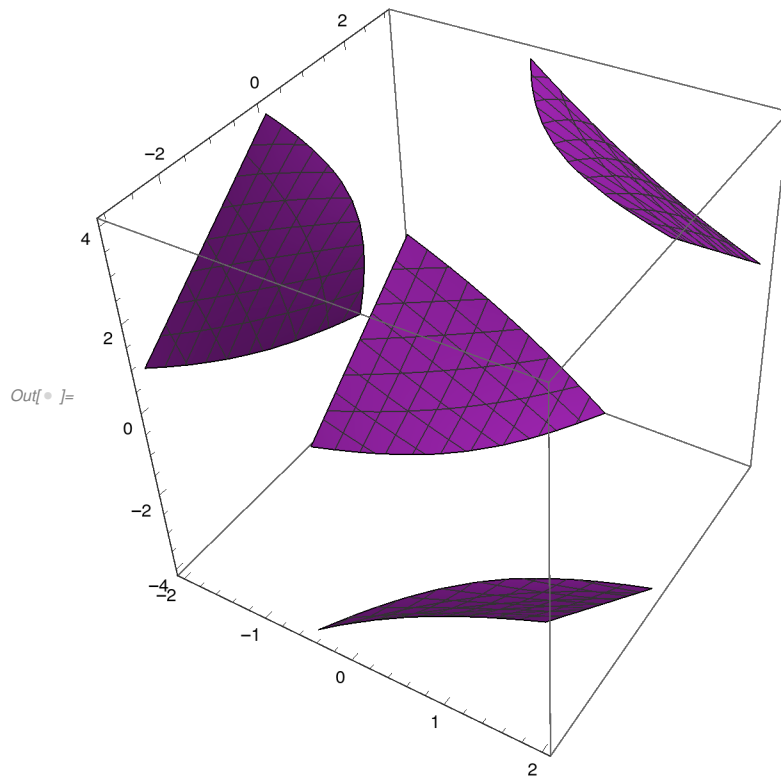
General: Further output of Set::write will be suppressed during this calculation.



```
In[ ]:= (* 9 *)
```

```
p := x^2 + y^2 + z^2 + x * y * z - 20
```

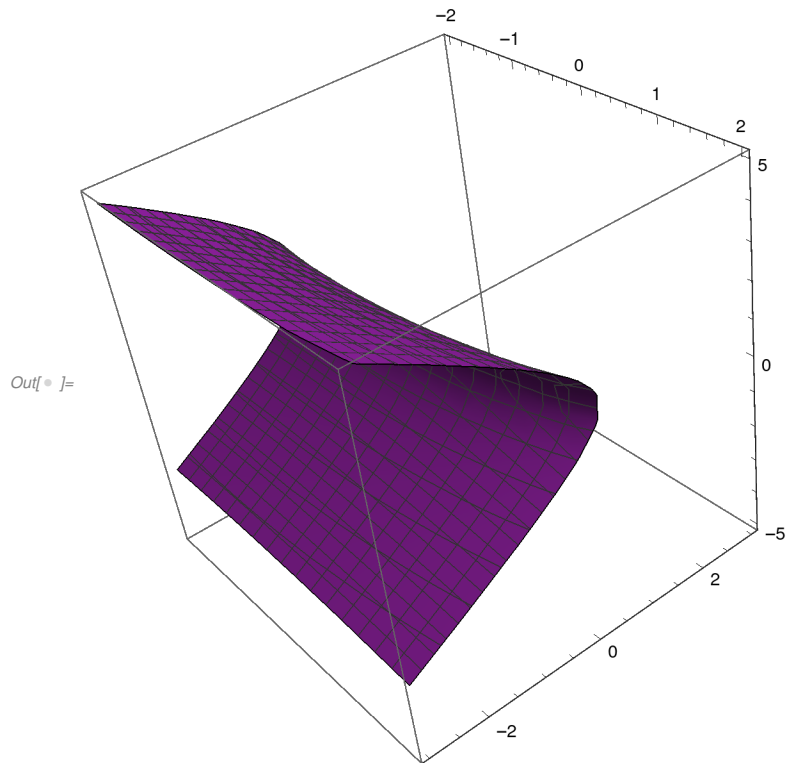
```
In[* ]:= ContourPlot3D[p == 0, {x, -2, 2}, {y, -3, 3}, {z, -4, 4}]
```



```
In[* ]:= (* 10 *)
```

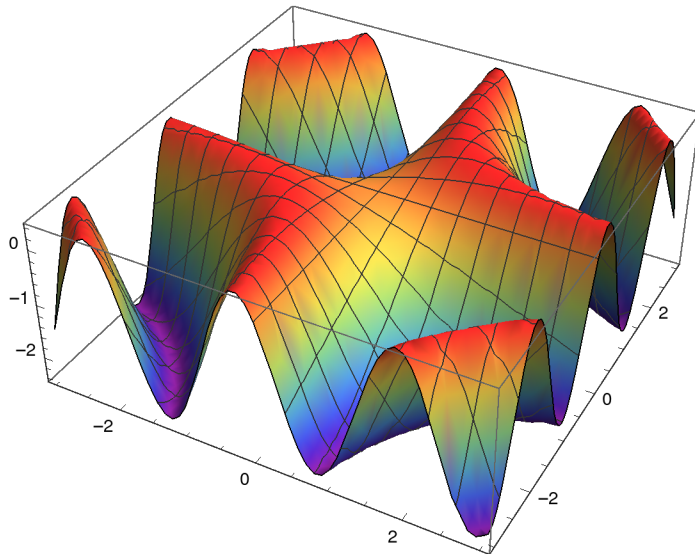
```
p := x^2 + 3 y^2 - 4 z^2 + 2 x - 12 y + 8 z - 7
```

```
In[* ]:= ContourPlot3D[p == 0, {x, -2, 2}, {y, -3, 3}, {z, -5, 5}]
```

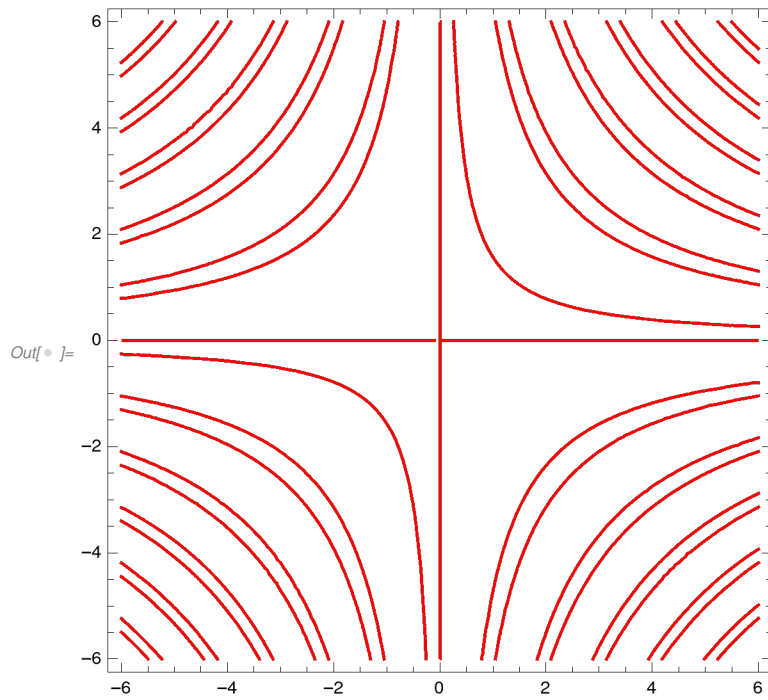


(\* 11a \*)

```
Plot3D[{Sin[x * y] + Cos[x * y] - 1}, {x, -3, 3}, {y, -3, 3}]
```



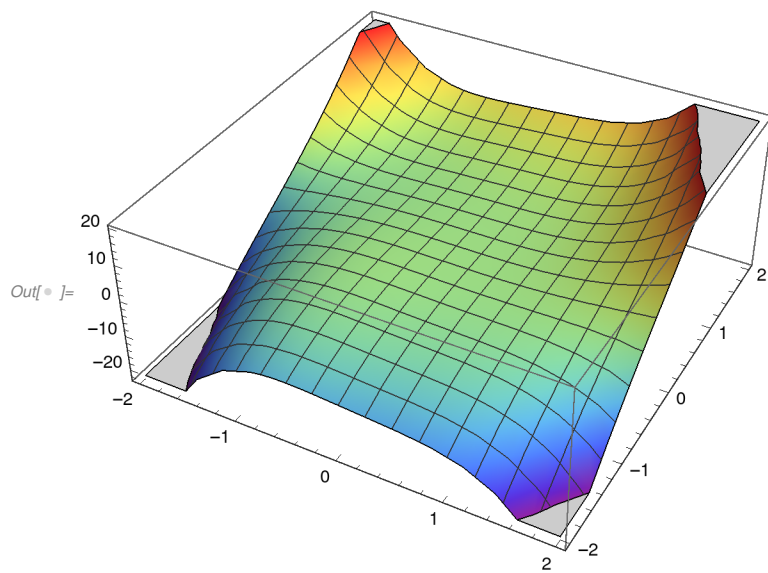
```
In[* ]:= ContourPlot[Sin[x * y]+Cos[x * y]-1 == 0, {x, -6, 6}, {y, -6, 6}]
```



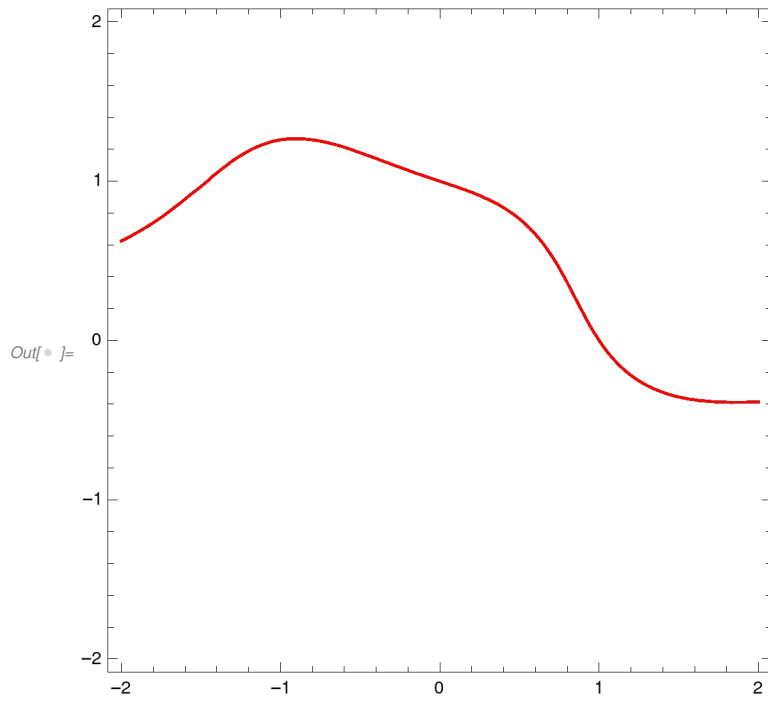
```
In[* ]:= (* 11b *)
```

```
p := x^4 * y + x^3 + y^3 + x * y - 1
```

```
In[* ]:= Plot3D[{p}, {x, -2, 2}, {y, -2, 2}]
```

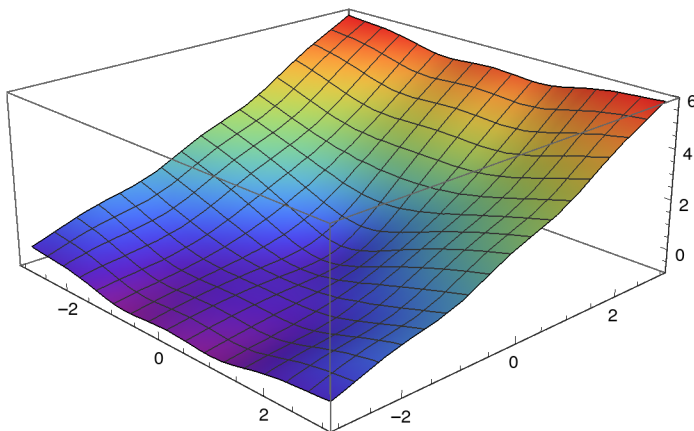


```
In[* ]:= ContourPlot[p == 0, {x, -2, 2}, {y, -2, 2}]
```

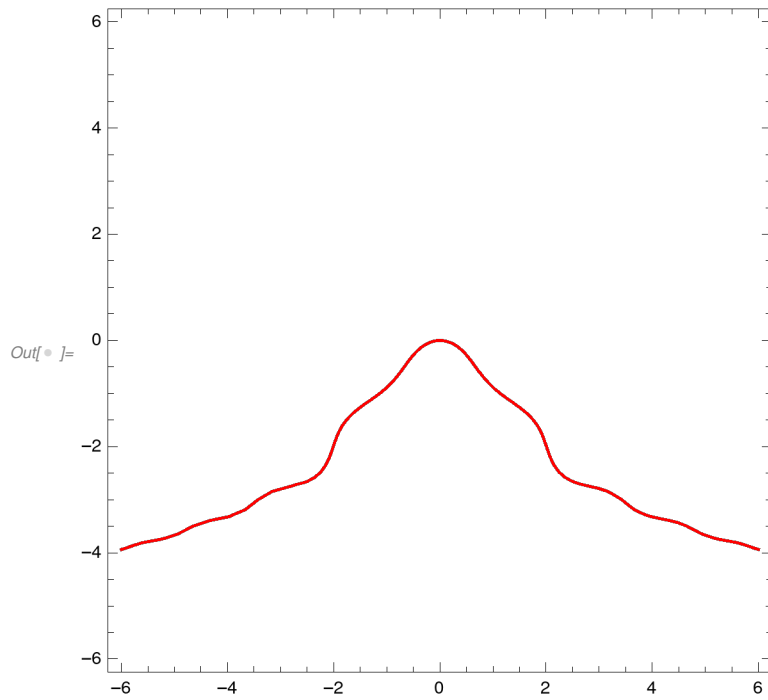


```
(* 11c *)
```

```
Plot3D[{Log[x^2 + y^2 + Cos[x * y]] + y}, {x, -3, 3}, {y, -3, 3}]
```



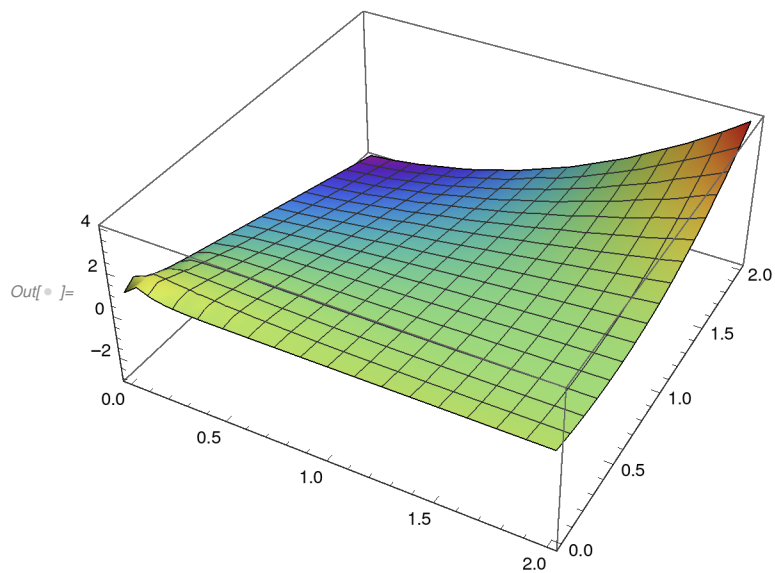
```
In[* ]:= ContourPlot[Log[x ^ 2 + y ^ 2 + Cos[x * y]] + y == 0, {x, -6, 6}, {y, -6, 6}]
```



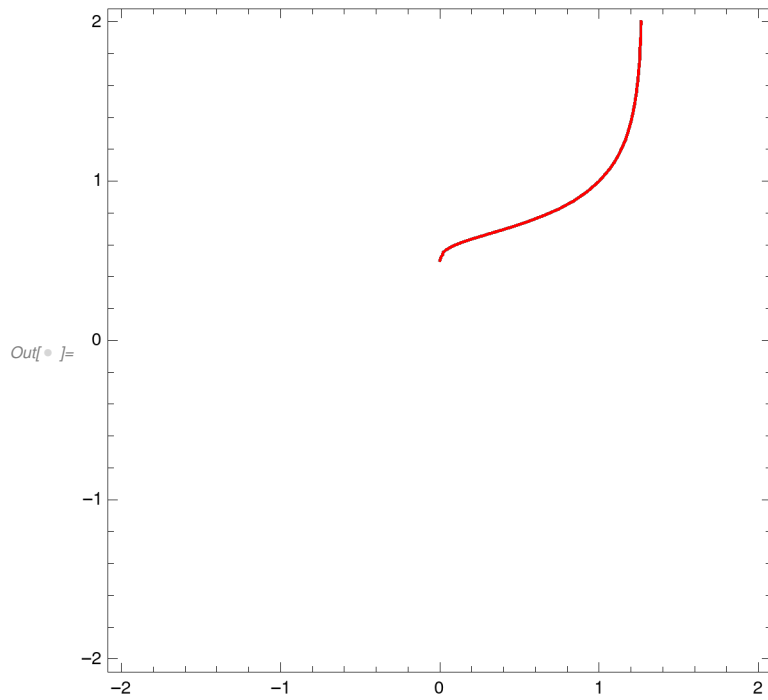
```
In[* ]:= (* 11d *)
```

```
p := x ^ y + y ^ x - 2 y
```

```
In[* ]:= Plot3D[{p}, {x, -2, 2}, {y, -2, 2}]
```



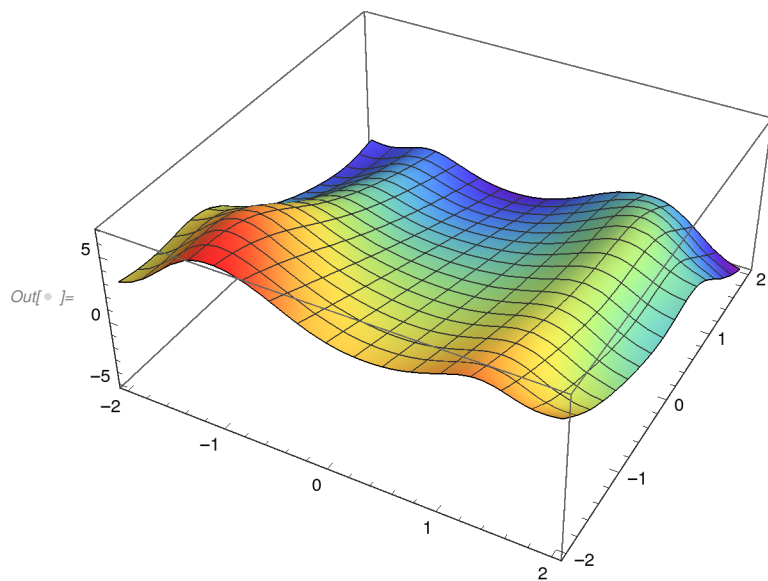
```
In[* ]:= ContourPlot[p == 0, {x, -2, 2}, {y, -2, 2}]
```



```
In[* ]:= (* 11e *)
```

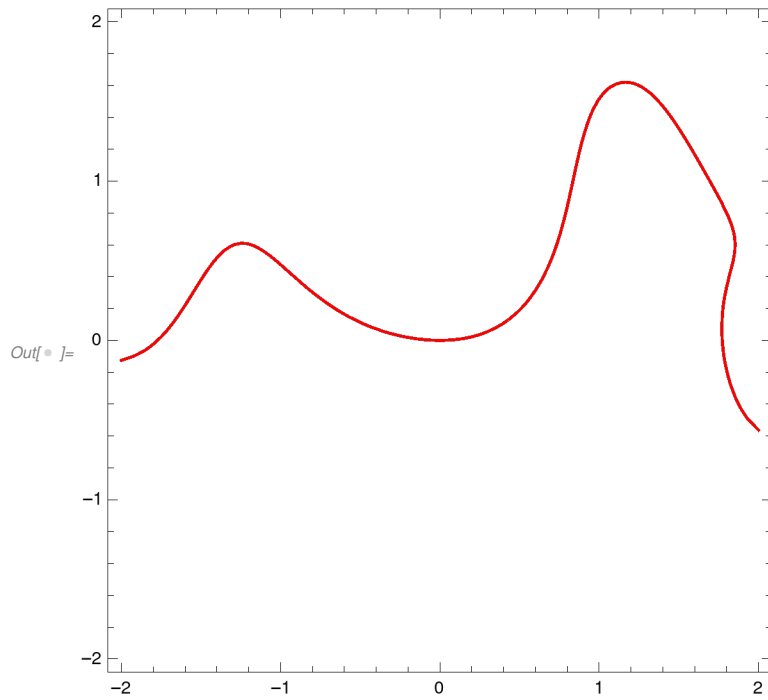
```
p := Exp[Sin[x^2]] + Exp[Sin[x * y]] - 2 y - 2
```

```
In[* ]:= Plot3D[{p}, {x, -2, 2}, {y, -2, 2}]
```





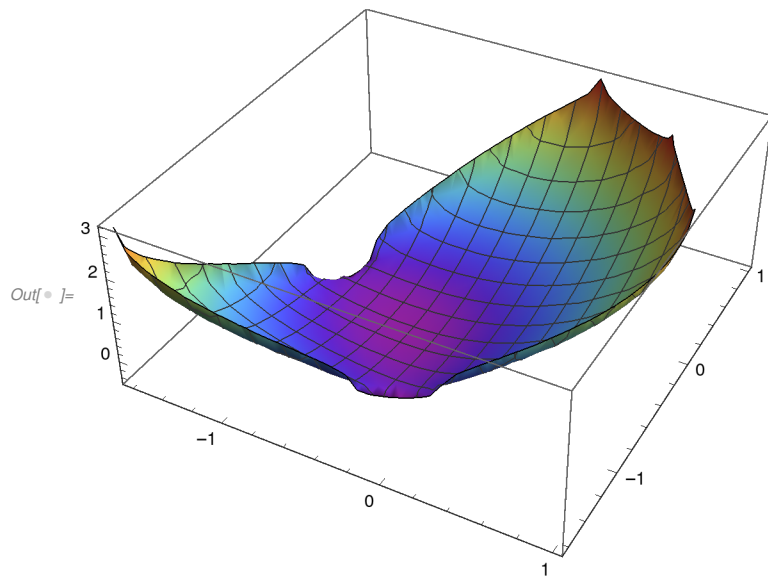
```
In[* ]:= ContourPlot[p == 0, {x, -2, 2}, {y, -2, 2}]
```



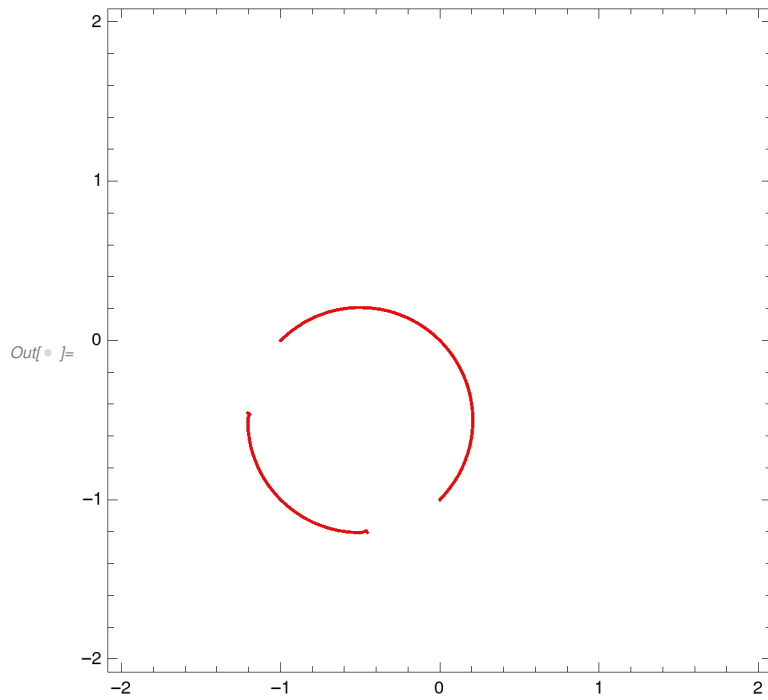
```
In[* ]:= (* 11f *)
```

```
p := Pi / 2 + ArcSin[x + y ^ 2] - ArcCos[y + x ^ 2]
```

```
In[* ]:= Plot3D[{p}, {x, -2, 2}, {y, -2, 2}]
```



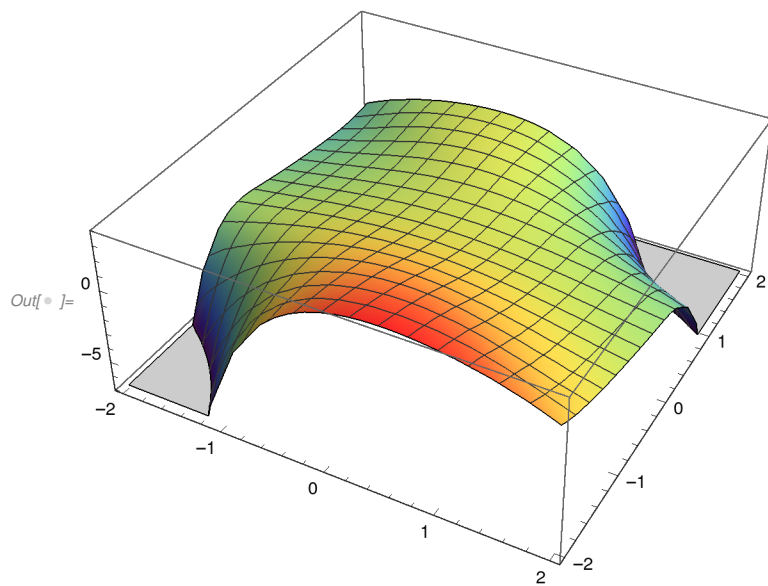
```
In[* ]:= ContourPlot[p == 0, {x, -2, 2}, {y, -2, 2}]
```



```
In[* ]:= (* 11g *)
```

```
p := ArcTan[y ^ 2 + x * y] - Exp[x * y] + Cos[x] - y
```

```
In[* ]:= Plot3D[{p}, {x, -2, 2}, {y, -2, 2}]
```



```
In[* ]:= ContourPlot[p == 0, {x, -2, 2}, {y, -2, 2}]
```

