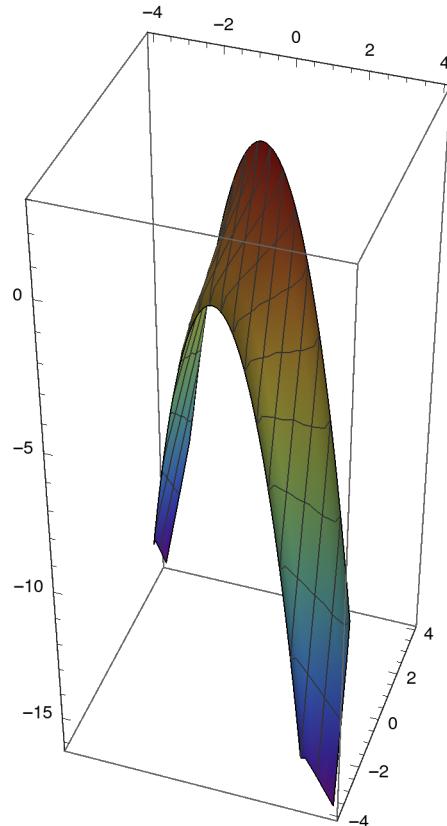


```
In[6]:= SetOptions[Plot3D(*Or whichever plot you desire*),
  ColorFunction → "Rainbow"(*One of many options*)];
(1)
```

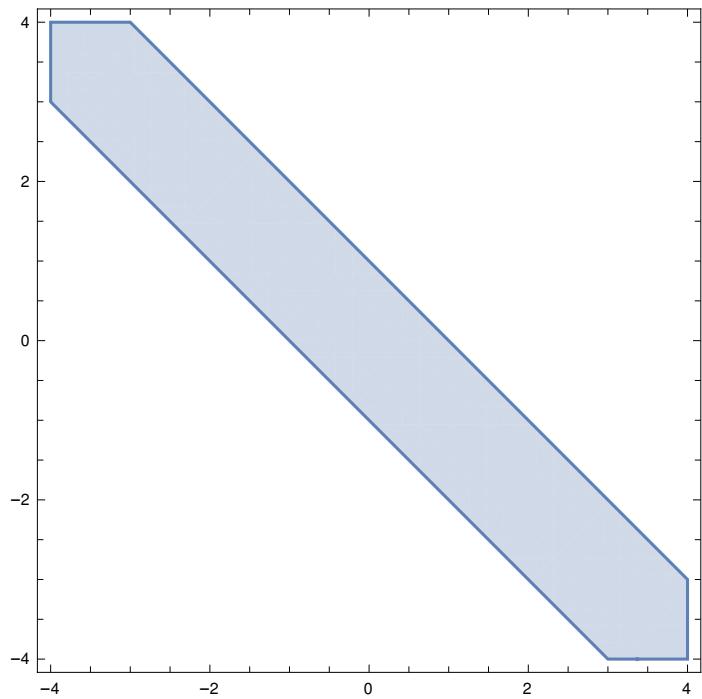
```
Out[6]= 1
```

```
In[7]:= Plot3D[ArcSin[x + y] + ArcTan[x + y] + x * y, {x, -4, 4}, {y, -4, 4}, BoxRatios → Automatic]
```



```
Out[7]=
```

```
RegionPlot[FunctionDomain[ArcSin[x + y] + ArcTan[x + y] + x * y , {x, y}],  
{x, -4, 4}, {y, -4, 4}, AspectRatio → Automatic]
```



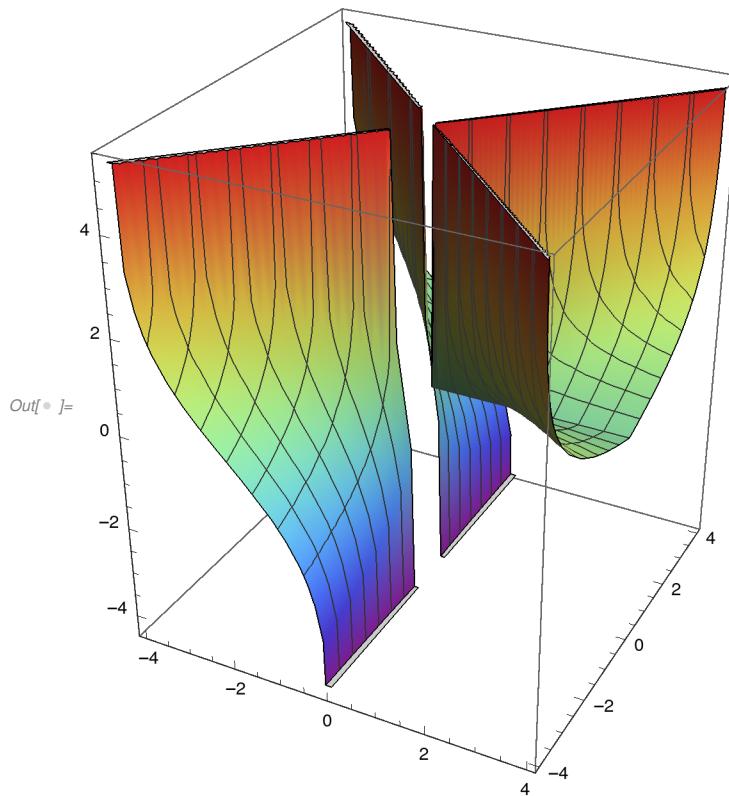
```
In[6]:= Plot3D[Log[x / (Abs[x] - Abs[y])], {x, -4, 4}, {y, -4, 4}, BoxRatios -> Automatic]
```

Power: Infinite expression $\frac{1}{0}$ encountered.

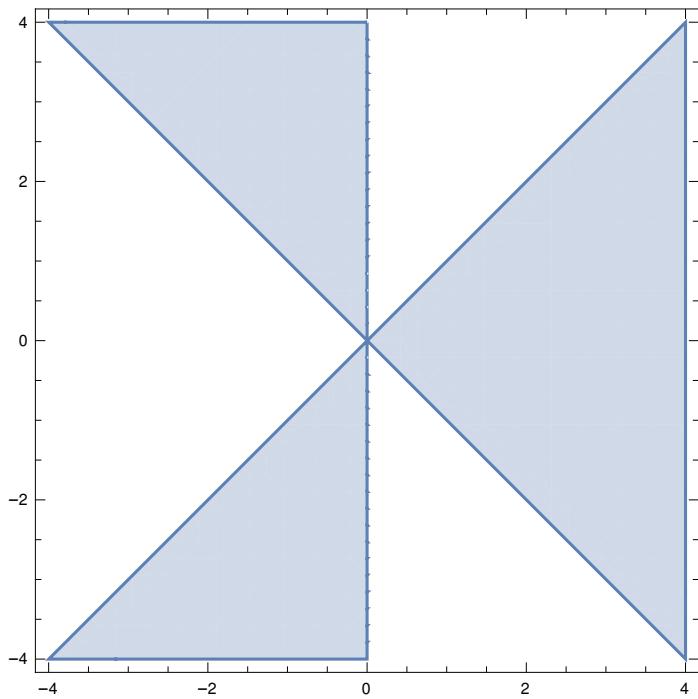
Power: Infinite expression $\frac{1}{0}$ encountered.

Power: Infinite expression $\frac{1}{0}$ encountered.

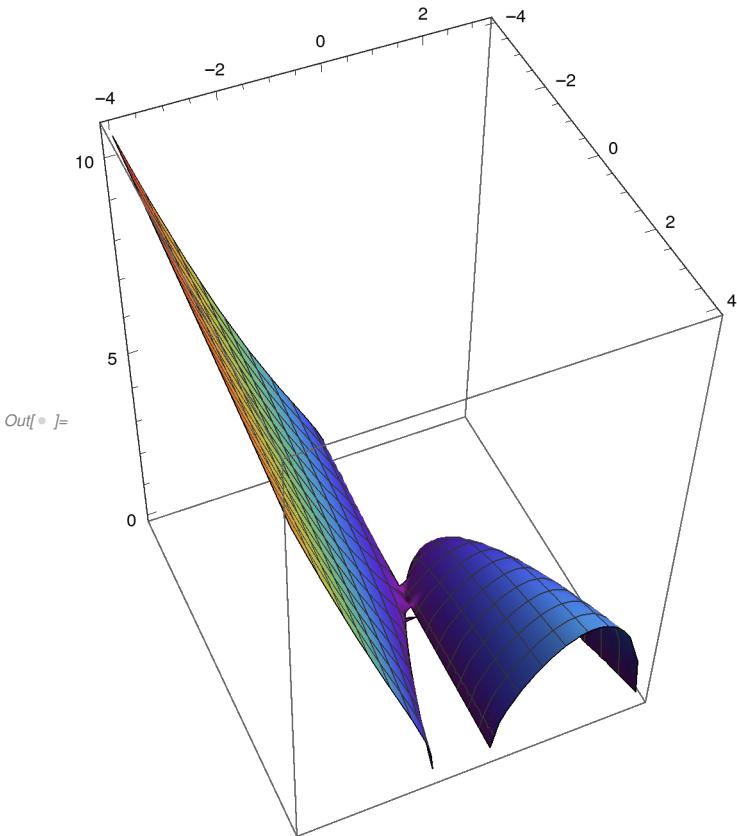
General: Further output of Power::infy will be suppressed during this calculation.



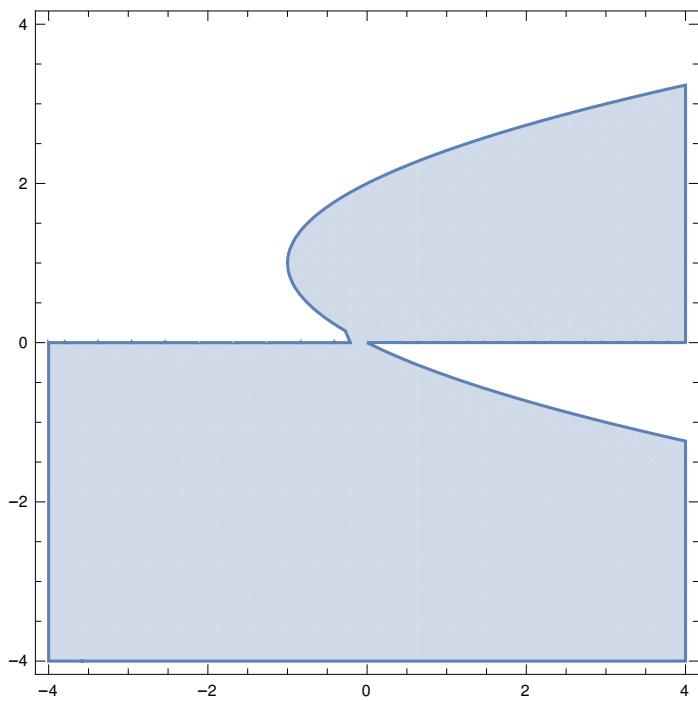
```
RegionPlot[FunctionDomain[Log[x / (Abs[x] - Abs[y])], {x, y}],  
{x, -4, 4}, {y, -4, 4}, AspectRatio -> Automatic]
```



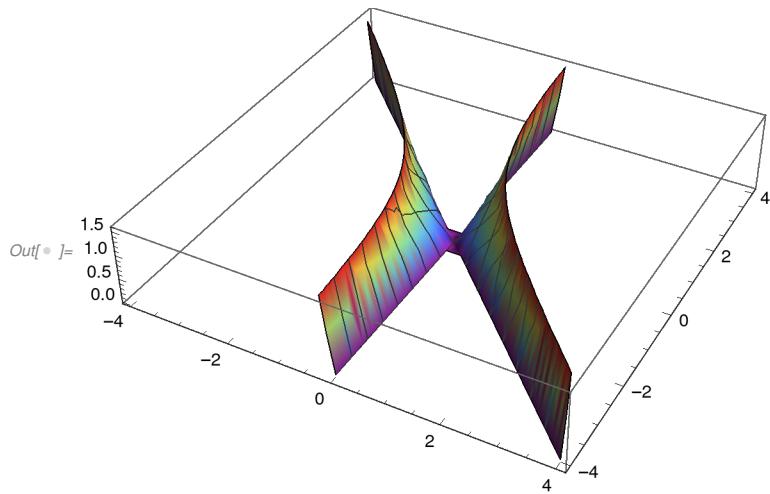
```
In[6]:= Plot3D[Sqrt[x * y - y ^ 3 + 2 y ^ 2], {x, -4, 4}, {y, -4, 4}, BoxRatios -> Automatic]
```



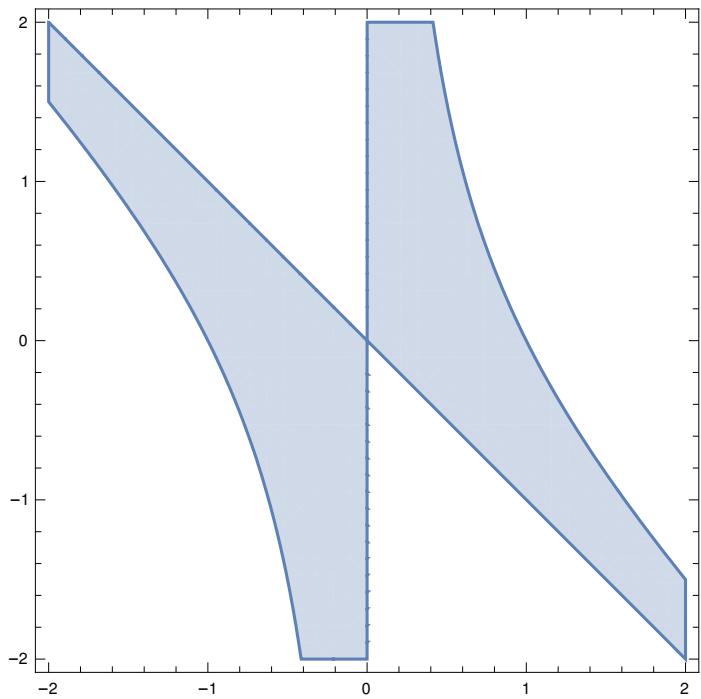
```
RegionPlot[FunctionDomain[Sqrt[x * y - y ^ 3 + 2 y ^ 2], {x, y}],  
{x, -4, 4}, {y, -4, 4}, AspectRatio → Automatic]
```



```
In[6]:= Plot3D[ArcSin[Sqrt[x * (x + y)]], {x, -4, 4}, {y, -4, 4}, BoxRatios → Automatic]
```

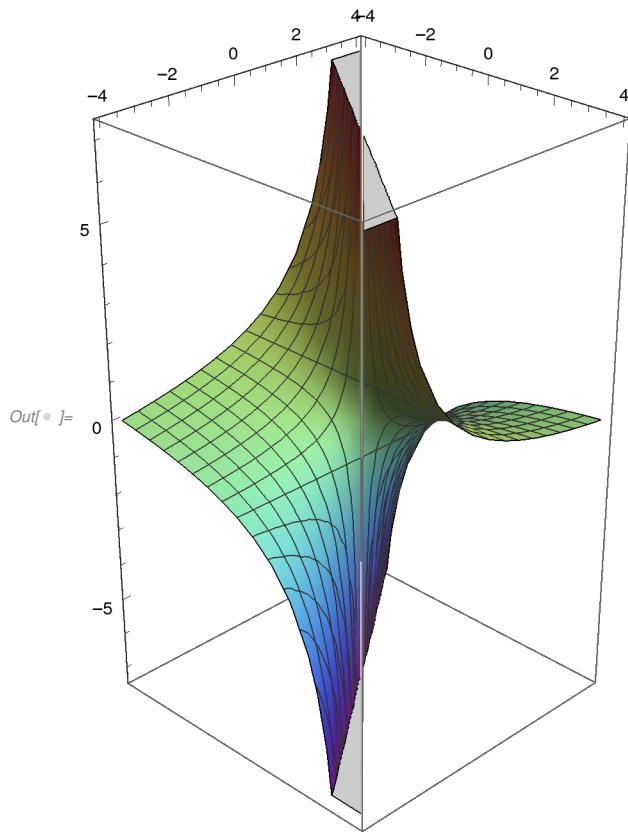


```
RegionPlot[FunctionDomain[ArcSin[Sqrt[x*(x+y)]], {x, y}],  
{x, -2, 2}, {y, -2, 2}, AspectRatio → Automatic]
```

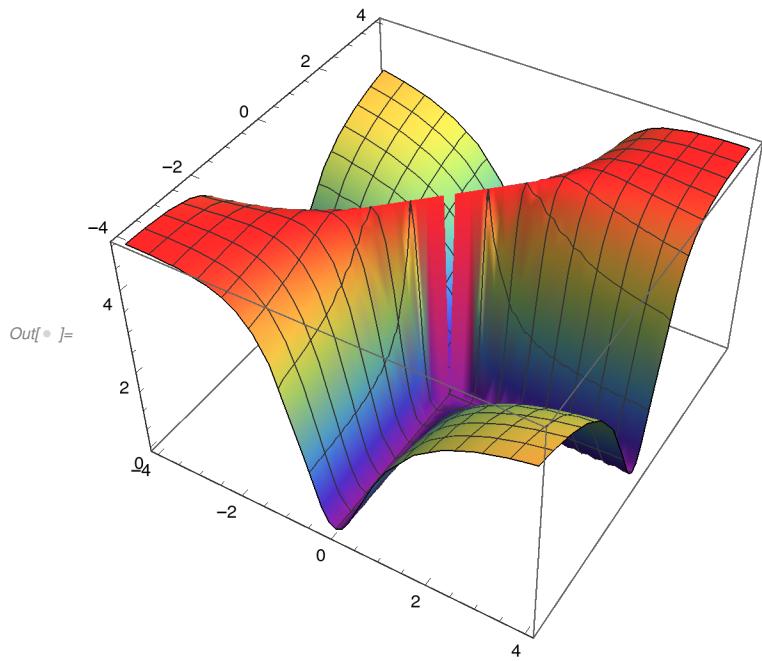


In[\circ] = **(*2*)**

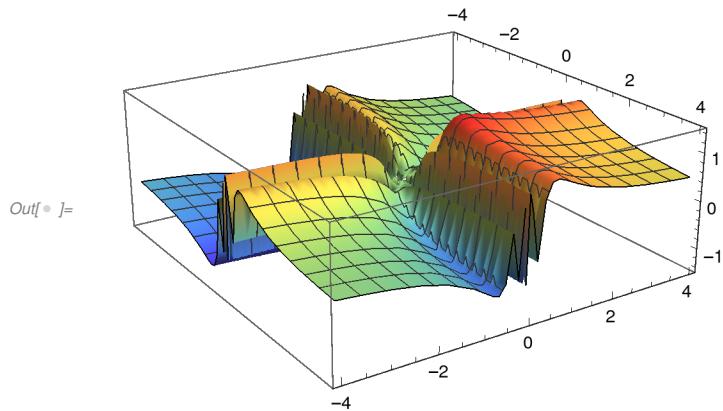
```
Plot3D[(x - y) / (x + y), {x, -4, 4}, {y, -4, 4}, BoxRatios -> Automatic]
```



```
In[8]:= Plot3D[(x^2 * y^2) / (x^2 * y^2 + (x - y)^2), {x, -4, 4}, {y, -4, 4}, BoxRatios -> Automatic]
```



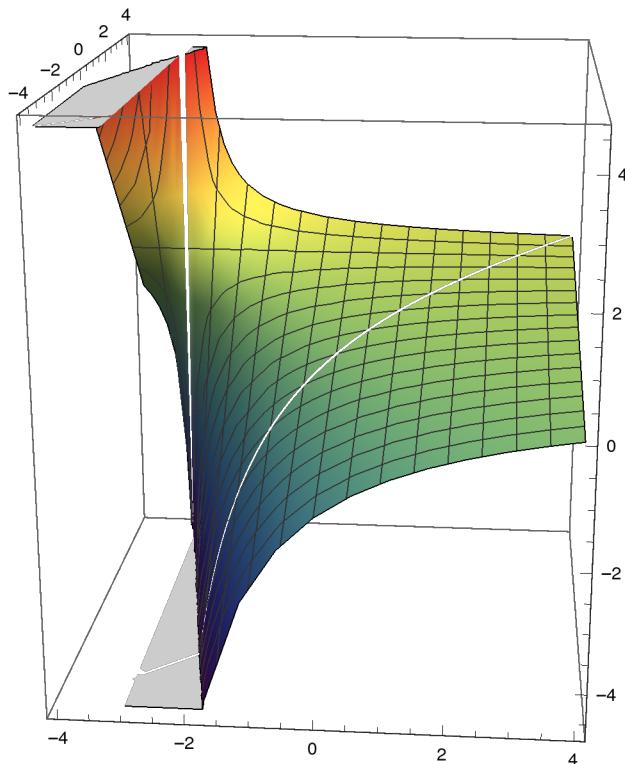
```
In[9]:= Plot3D[(x + y) * Sin[1/x] * Sin[1/y], {x, -4, 4}, {y, -4, 4}, BoxRatios -> Automatic]
```



In[•]:= Plot3D[(x^2 - y^2) / (x^2 - 3 y + 3 x - x * y), {x, -4, 4}, {y, -4, 4}, BoxRatios -> Automatic]

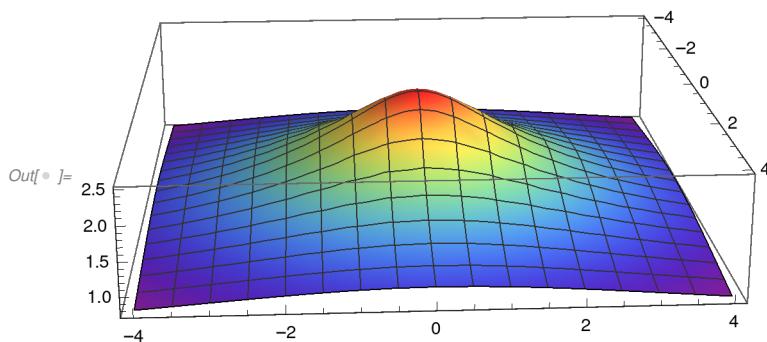
Power: Infinite expression $\frac{1}{0}$ encountered.

Infinity: Indeterminate expression 0. ComplexInfinity encountered.



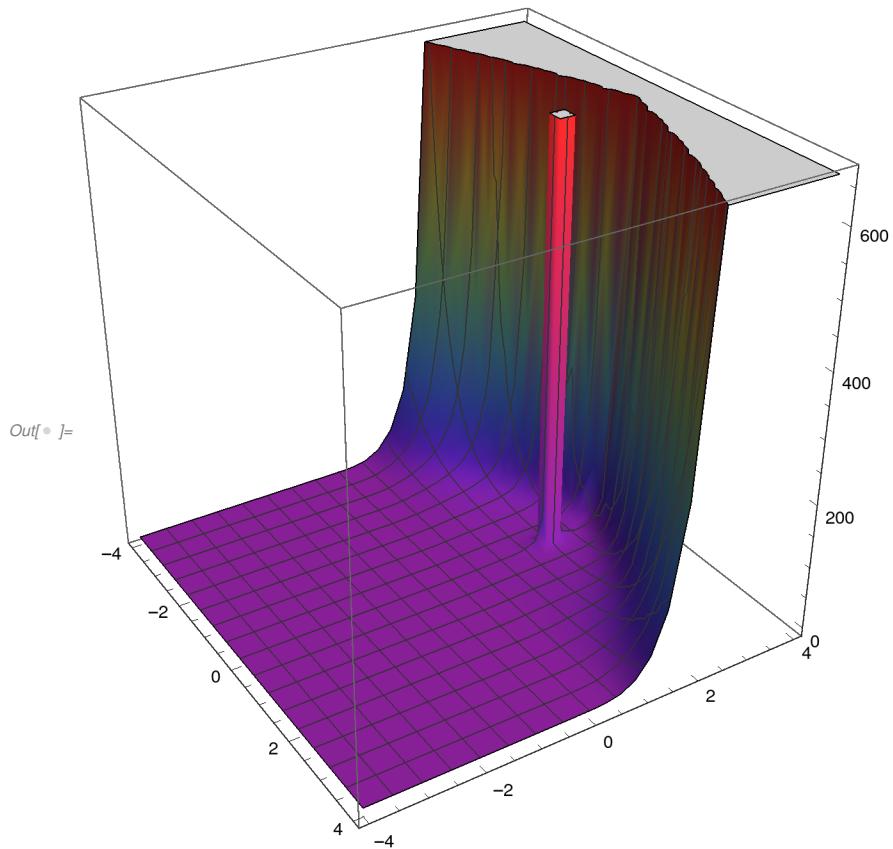
Out[•]:=

In[•]:= Plot3D[5 (Sqrt[x^2 + y^2 + 1] - 1) / (x^2 + y^2), {x, -4, 4}, {y, -4, 4}, BoxRatios -> Automatic]



Out[•]:=

```
In[6]:= Plot3D[(Exp[(Abs[x] + (y - 2)^2) y]) / (Abs[x] + (y - 2)^2),  
{x, -4, 4}, {y, -4, 4}, BoxRatios -> {1, 1, 1}]
```



```
In[6]:= Plot3D[(Tan[Sqrt[(x - 4)^2 - y^2]]) / (x^2 * Sqrt[(x - 4)^2 - y^2]),
{x, -4, 4}, {y, -4, 4}, BoxRatios -> {1, 1, 1}]
```

