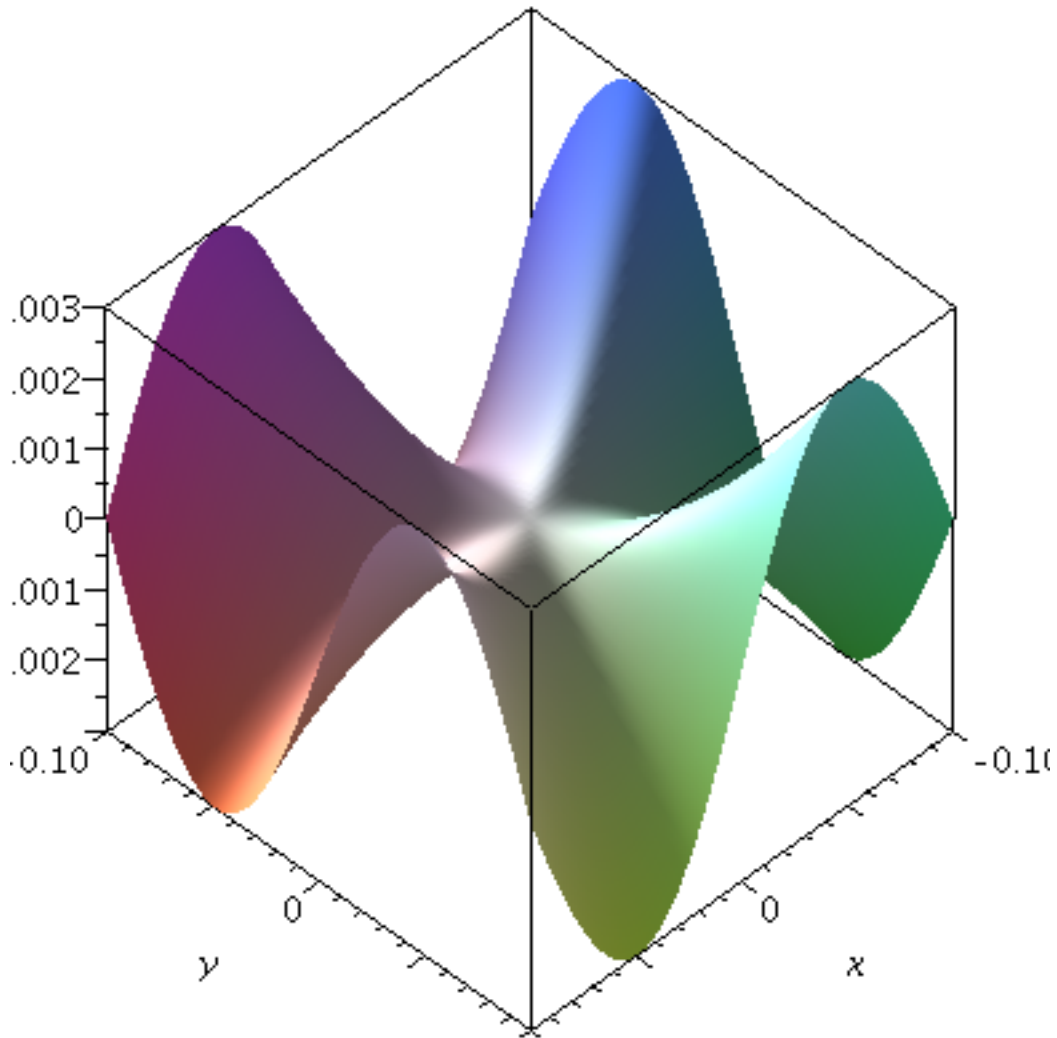


```
> f :=  $\frac{xy(x^2 - y^2)}{x^2 + y^2}$  :
```

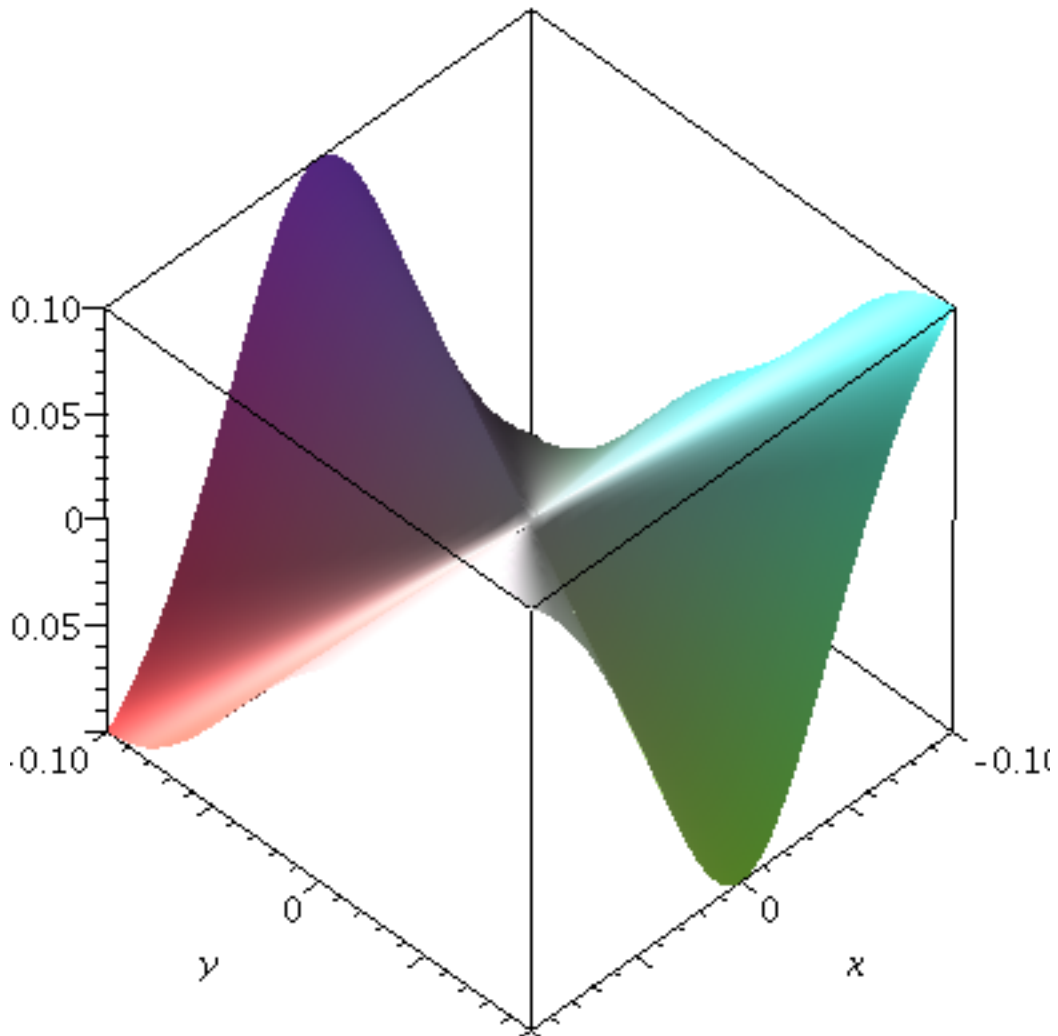
```
> f_x :=  $\frac{y(x^4 - y^4 + 4x^2y^2)}{(x^2 + y^2)^2}$  :
```

```
> f_xy :=  $\frac{x^6 + 9x^4y^2 - 9y^4x^2 - y^6}{(x^2 + y^2)^3}$  :
```

```
> plot3d(f, x=-0.1..0.1, y=-0.1..0.1, numpoints = 5000, style = surface, shading = xyz, axes = boxed, lightmodel = light3, glossiness = 0.5)
```



```
> plot3d(f_x, x=-0.1..0.1, y=-0.1..0.1, numpoints = 5000, style = surface, shading = xyz, axes = boxed, lightmodel = light3, glossiness = 0.5);
```



```
>
```

> `plot3d(fxy, x=-0.1..0.1, y=-0.1..0.1, numpoints = 20000, style = surface, shading = xyz, axes = boxed, lightmodel = light3, glossiness = 0.5)`

