

Surface Plot of a 2-D Function

Created using Maple 18.00

Jake Bobowski

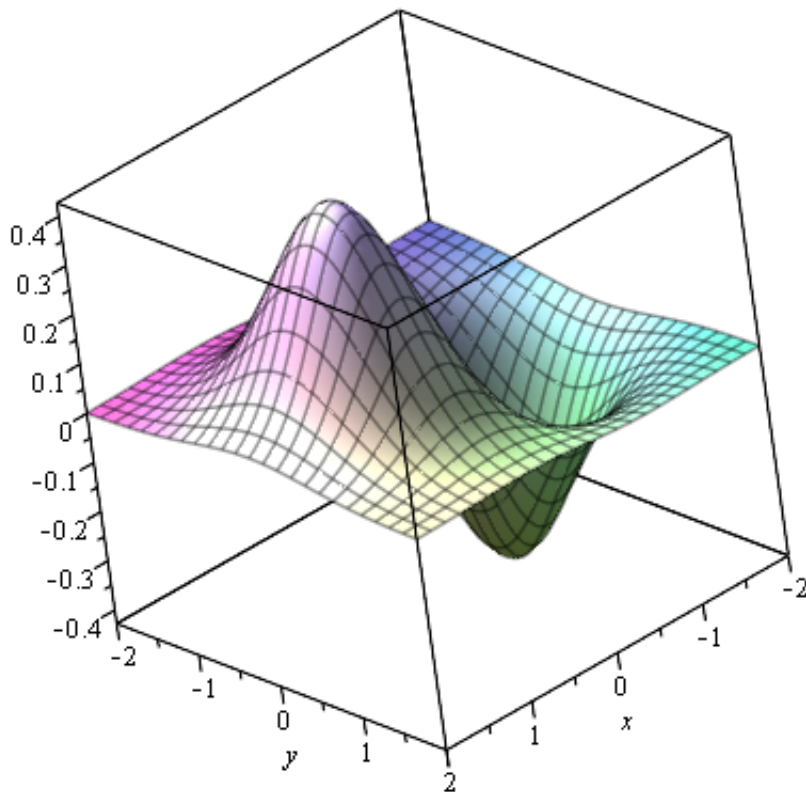
```
> restart;  
with(StringTools) :  
FormatTime("%m-%d-%Y, %H:%M");  
"04-20-2015, 17:15"
```

(1)

Below is an example of a surface plot of a function of two variables $f = f(x, y)$. First, the function (fcn) is defined. Then, $plot3d$ is used to visualize the function. The horizontal axes are x and y and the vertical axis is the value of the function at the corresponding (x, y) point.

```
> fcn := x * exp(-x^2 - y^2);  
fcn := x e-x2 - y2  
> plot3d(fcn, x=-2..2, y=-2..2);
```

(2)



If you scroll the mouse over the plot and left-click, you can rotate it (change the orientation of the view)

>