

with(plots):

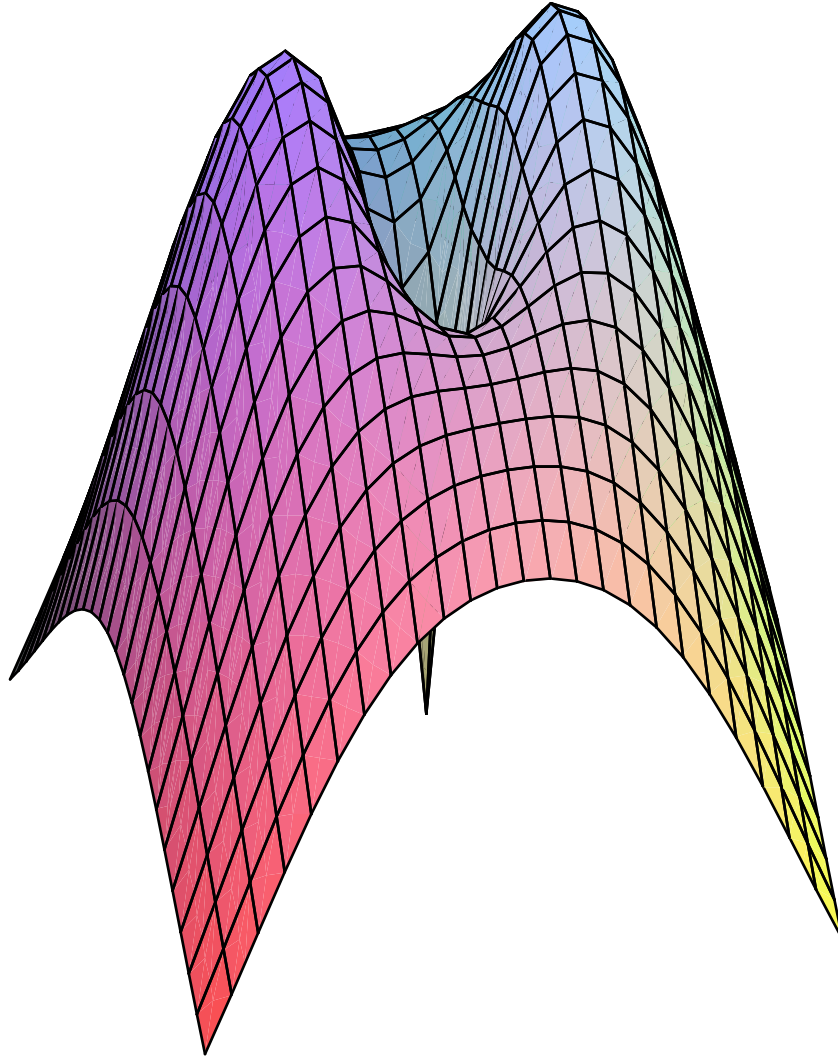
$$f := (x, y) \rightarrow \frac{10 \cdot \sin(\text{sqrt}(x^2 + 2y^2))}{\text{sqrt}(2x^2 + y^2) + 1};$$

$$(x, y) \rightarrow \frac{10 \sin(\sqrt{x^2 + 2y^2})}{\sqrt{2x^2 + y^2} + 1}$$

(1)

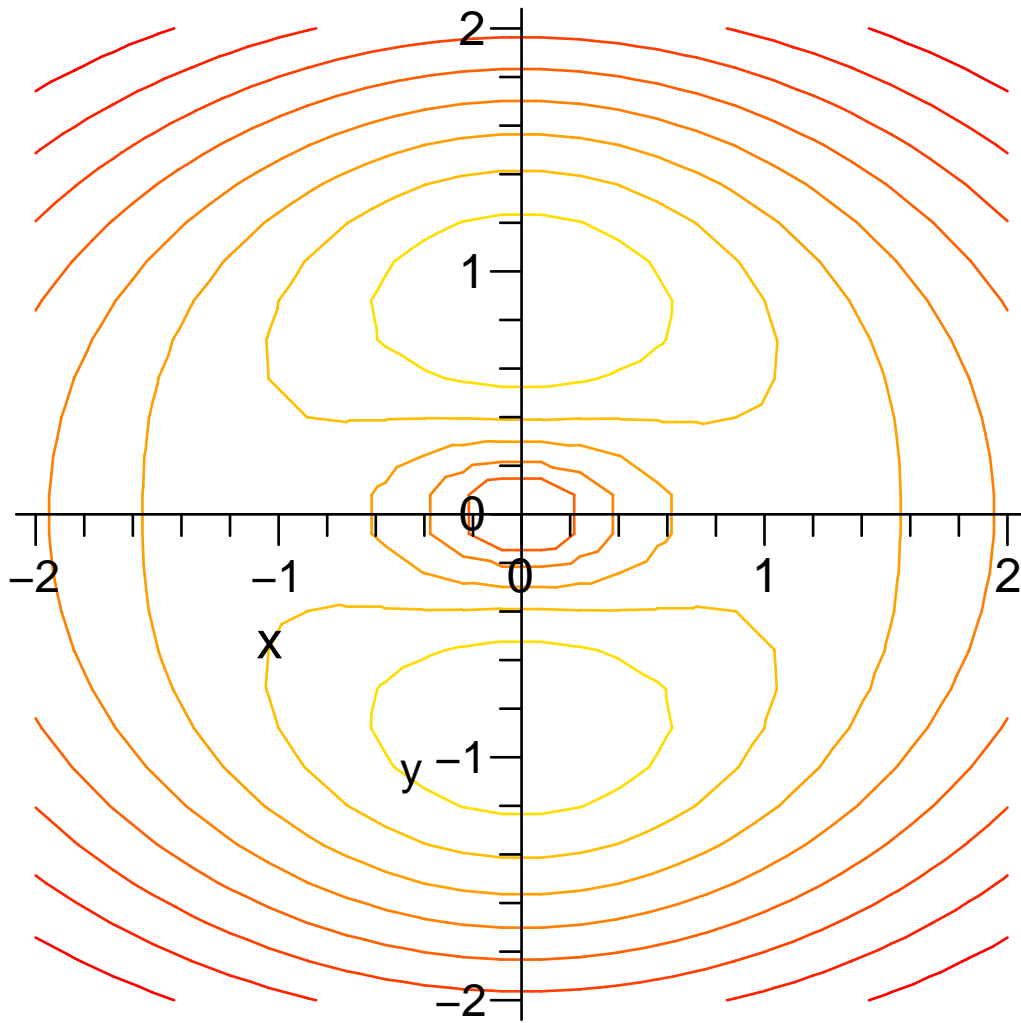
Graph of f:

plot3d(f(x, y), x = -2..2, y = -2..2, scaling = constrained);



Level curves of f:

contourplot(f(x, y), x = -2..2, y = -2..2);



Gradient vector field of f :

`fieldplot([diff(f(x, y), x), diff(f(x, y), y)], x = -2..2, y = -2..2);`

