```
> read('bsp_VII_3_9.mws');
```

$$a := -3$$

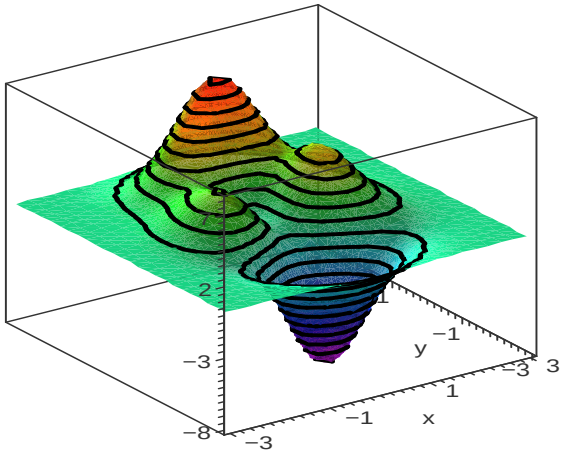
$$b := 3$$

$$c := -3$$

$$d := 3$$

$$f := 10\left(x^2 + y^5 + 1/5\,x\right)e^{-x^2-y^2}$$

Graph von f

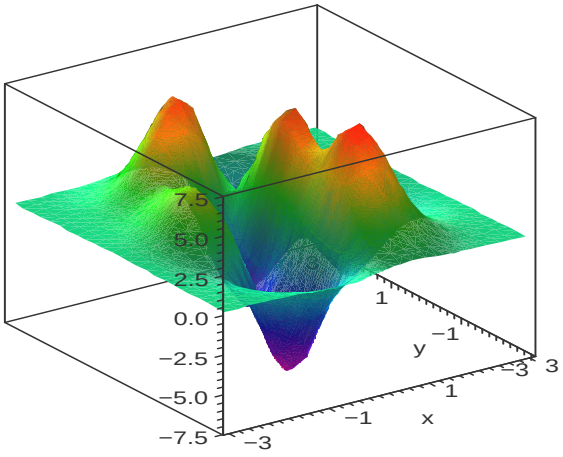


"*DiepartiellenAbleitungenersterOrdnungvonf*"

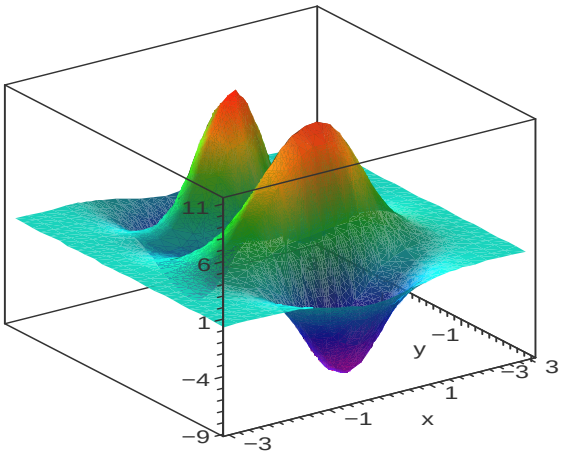
$$fx := -2\,e^{-x^2-y^2}\left(-10\,x - 1 + 10\,x^3 + 10\,xy^5 + 2\,x^2\right)$$

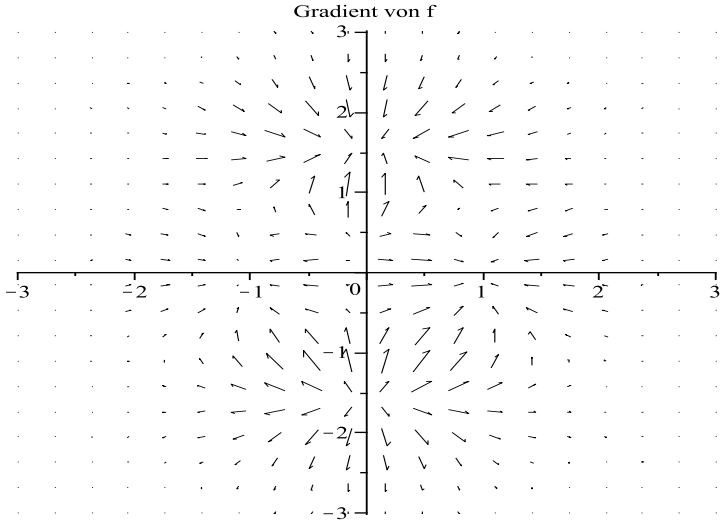
$$fy := -2\,ye^{-x^2-y^2}\left(-25\,y^3 + 10\,x^2 + 10\,y^5 + 2\,x\right)$$

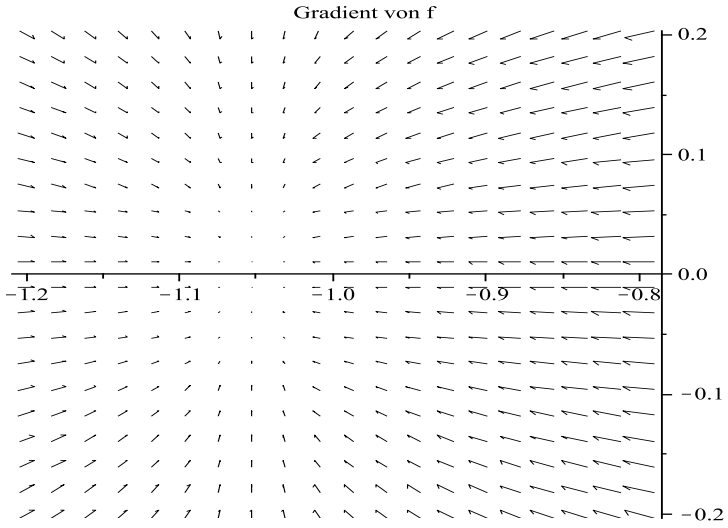
Graph von fx

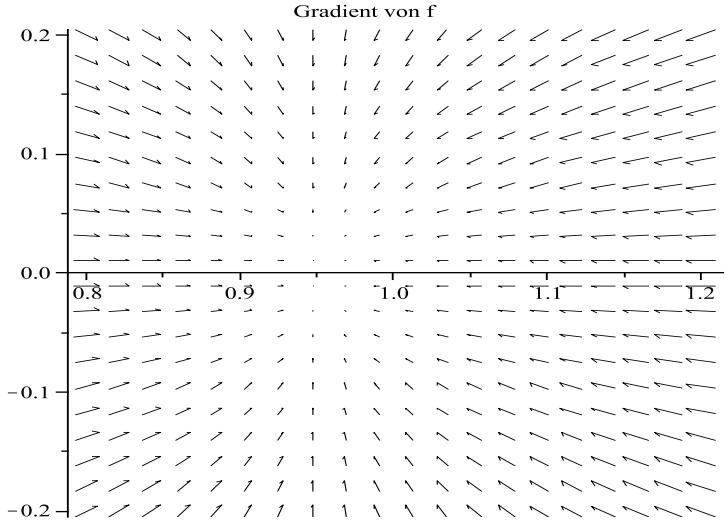


Graph von fy




Gradient von f
3
2
1
−1
−2
−3
−3
−2
−1
0
1
2
3


Gradient von f
0.2
0.1
0.0
−0.1
−0.2
−1.2
−1.1
−1.0
−0.9
−0.8


Gradient von f
0.2
0.1
0.0
−0.1
−0.2
0.8
0.9
1.0
1.1
1.2