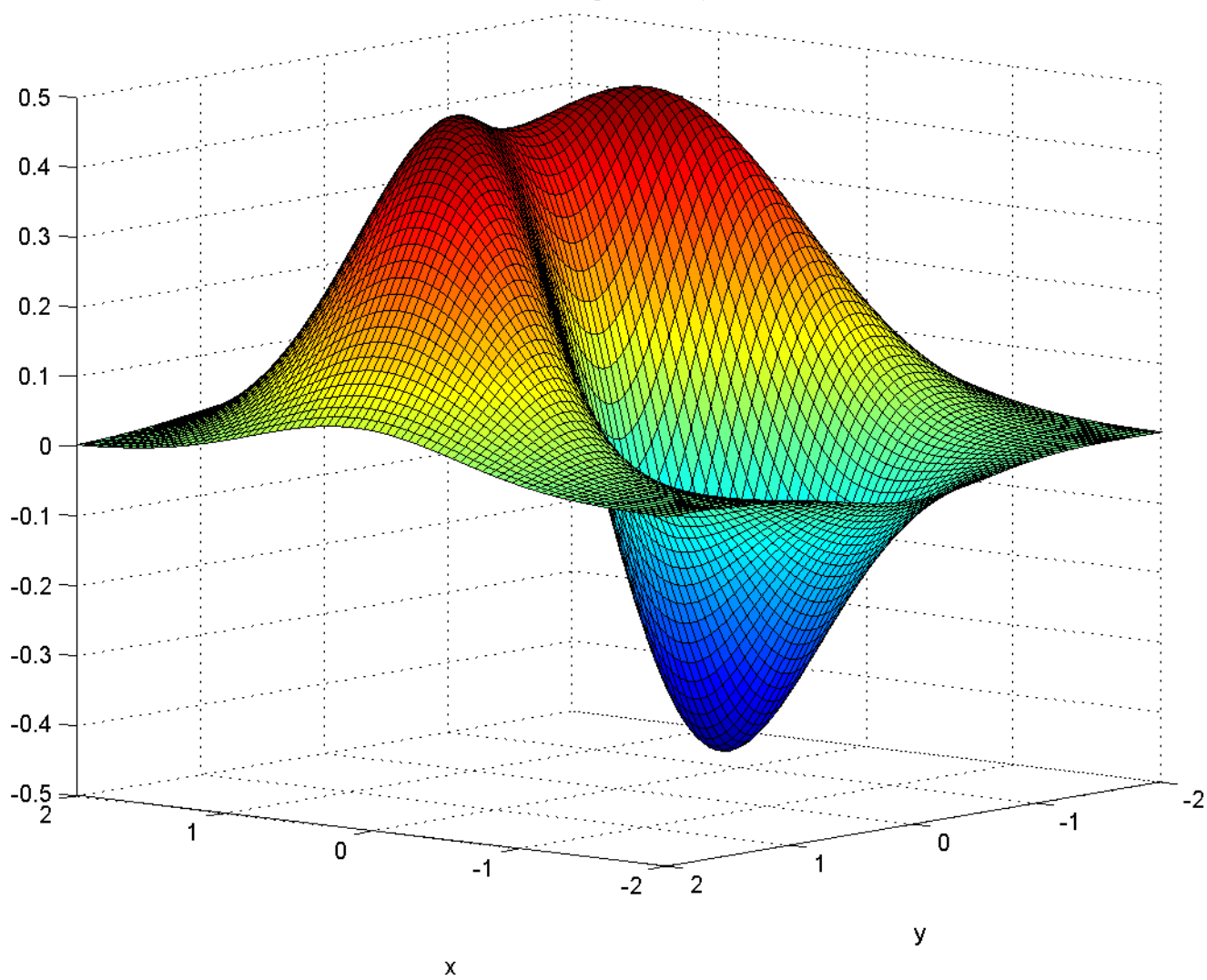


```
1 % program for the gradient
2 % Robert Denk 10.4.2005
3 clear all;
4 close all;
5
6 vect = -2:0.05:2;
7
8 figure(1);
9 [x,y] = meshgrid(vect,vect);
10 z = (x+y.^2).*exp(-(x.^2+y.^2));
11 set(gcf, 'Position',[1 440 1024 672]);
12 surf(x,y,z);
13 view(-140,9);
14 xlabel('x');
15 ylabel('y');
16 title('Zu Aufgabe 4.3 a');
17
18 figure(2);
19 vect = -2:0.05:2;
20 [x,y] = meshgrid(vect,vect);
21 z = x.^4+x.^2-y.^2+2*x.*y+8*x;
22 set(gcf, 'Position',[1 440 1024 672]);
23 surf(x,y,z);
24 view(-130,10);
25 xlabel('x');
26 ylabel('y');
27 title('Zu Aufgabe 4.3 b');
28
29
30
31
```

Zu Aufgabe 4.3 a)



Zu Aufgabe 4.3 b)

