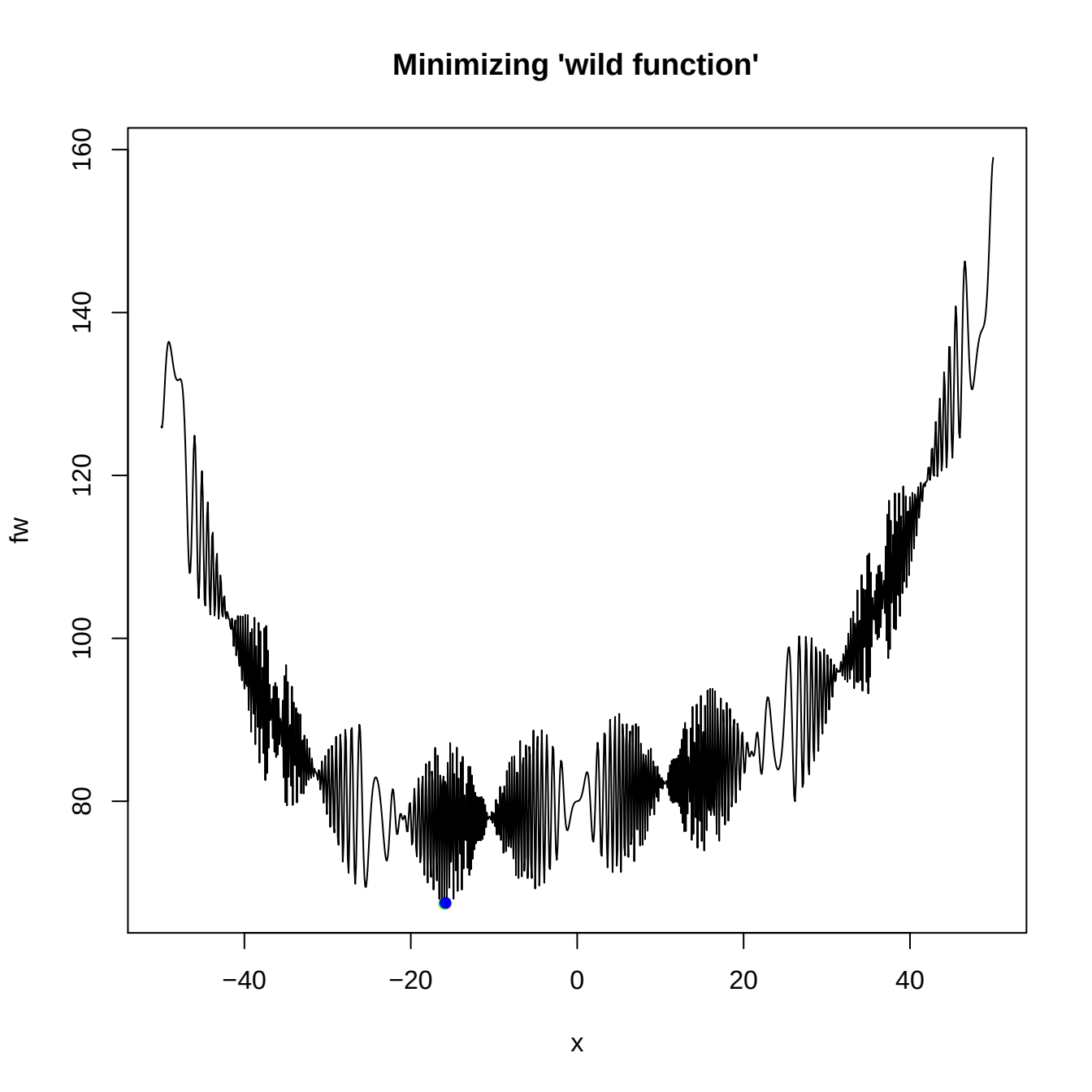
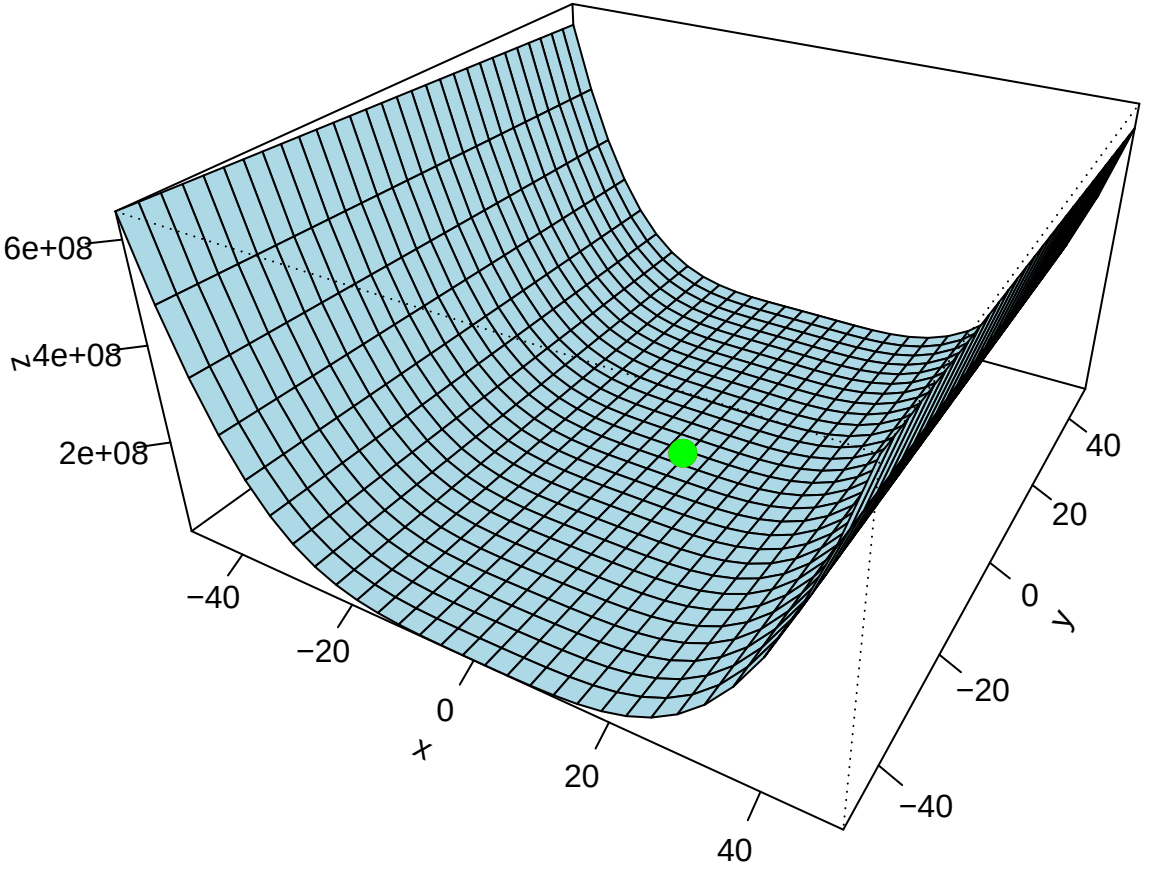
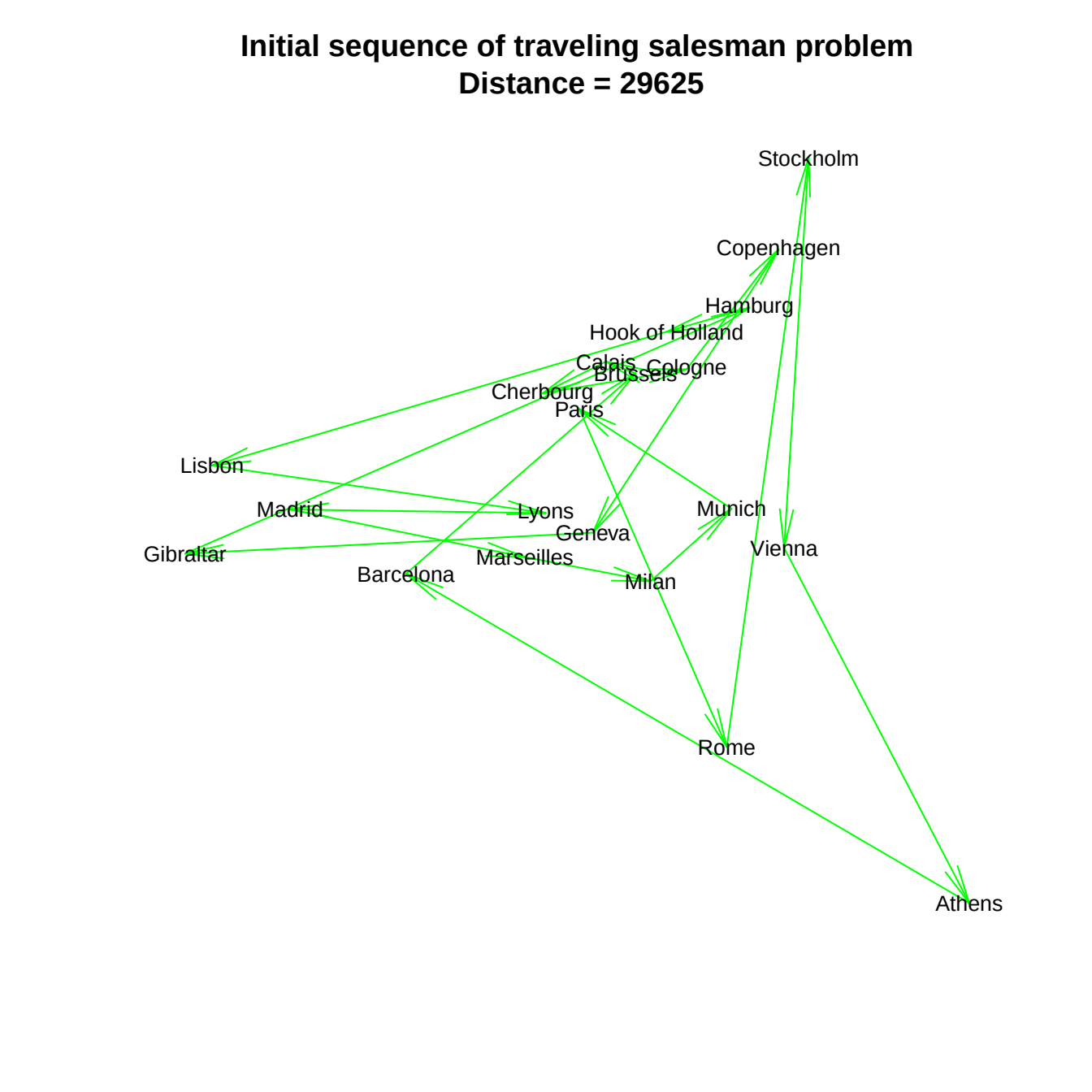
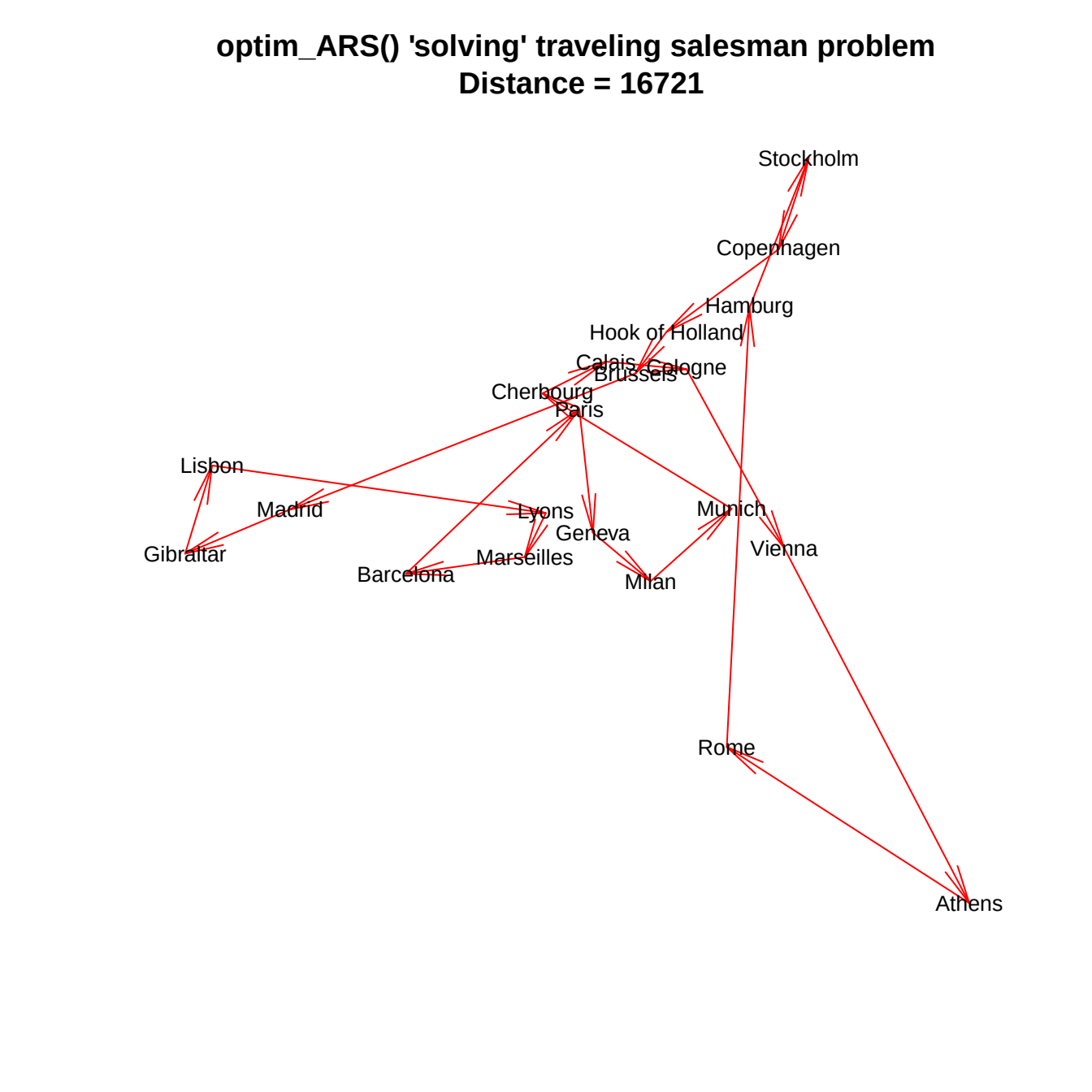
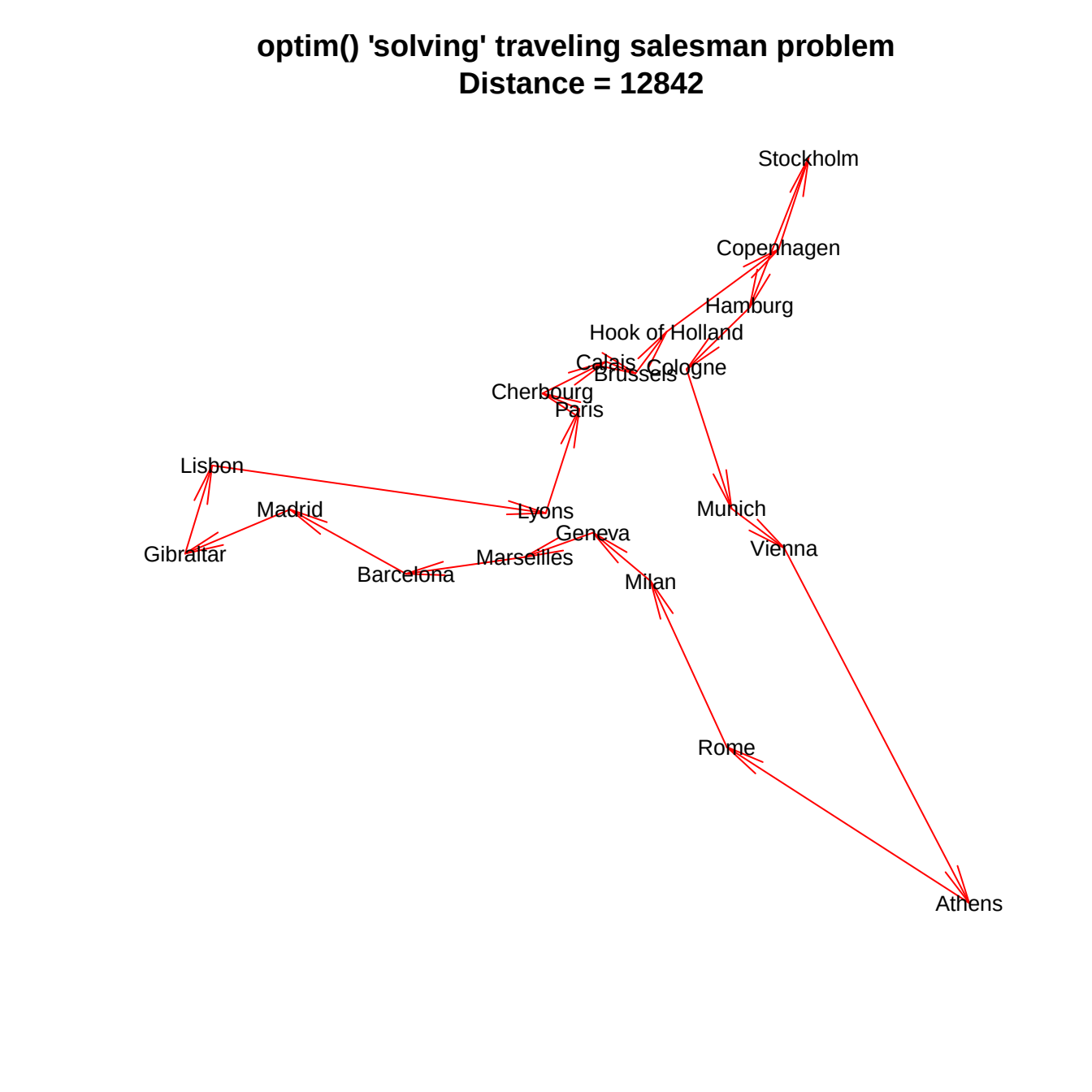
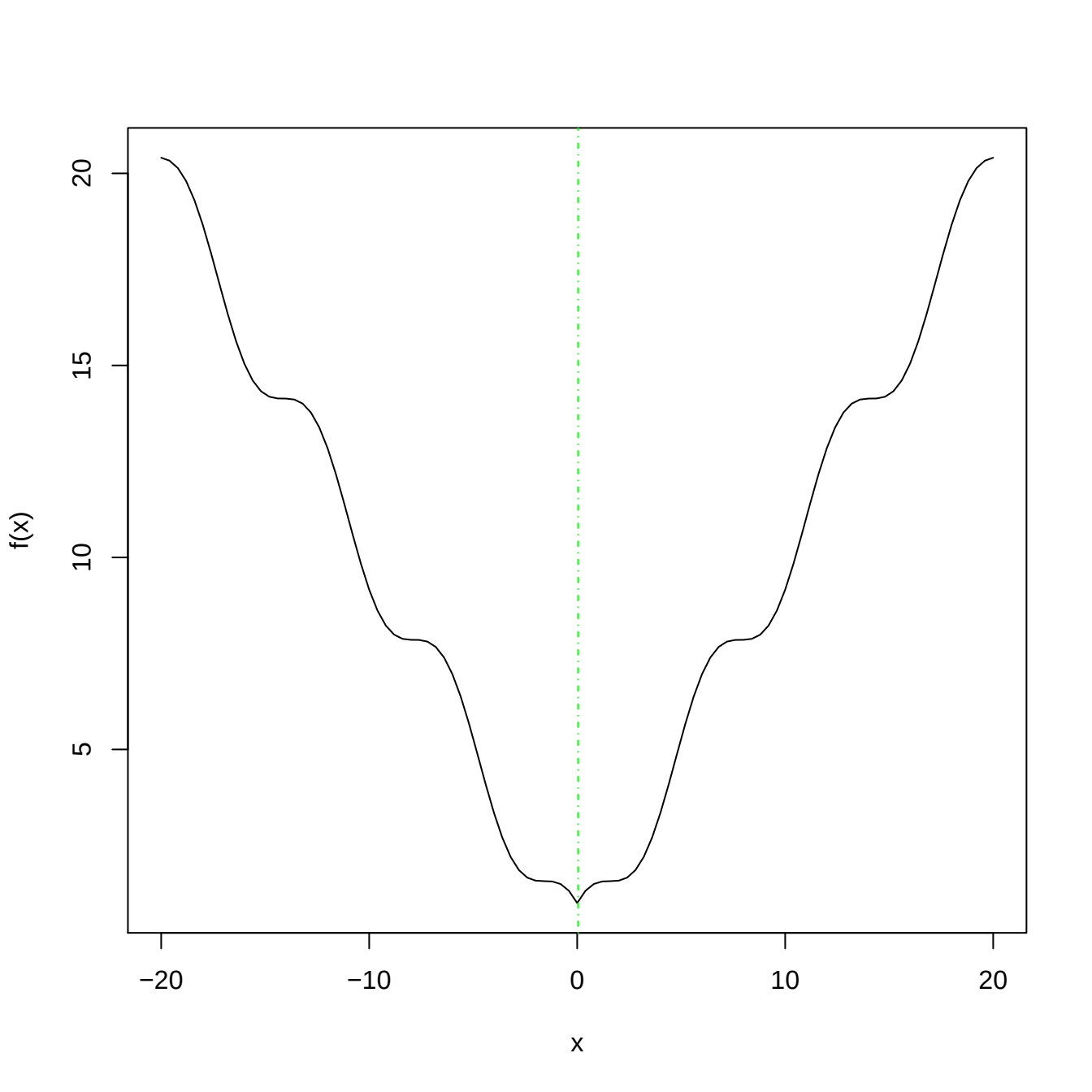

Minimizing 'wild function'
fw
160
140
120
100
80
−40
−20
0
20
40
x

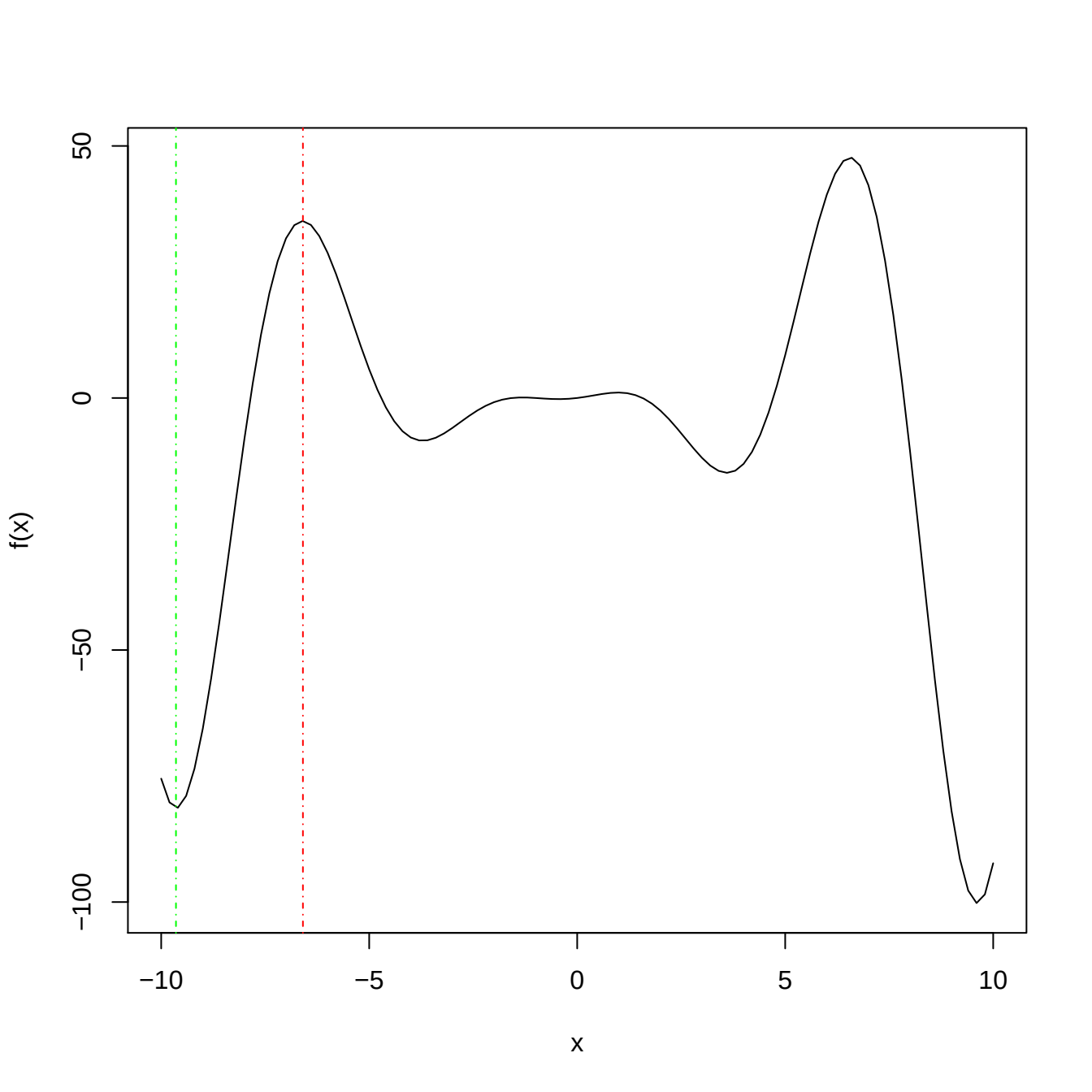

6e+08
4e+08
2e+08
z
−40
−20
0
20
40
x
40
20
0
−20
−40
y

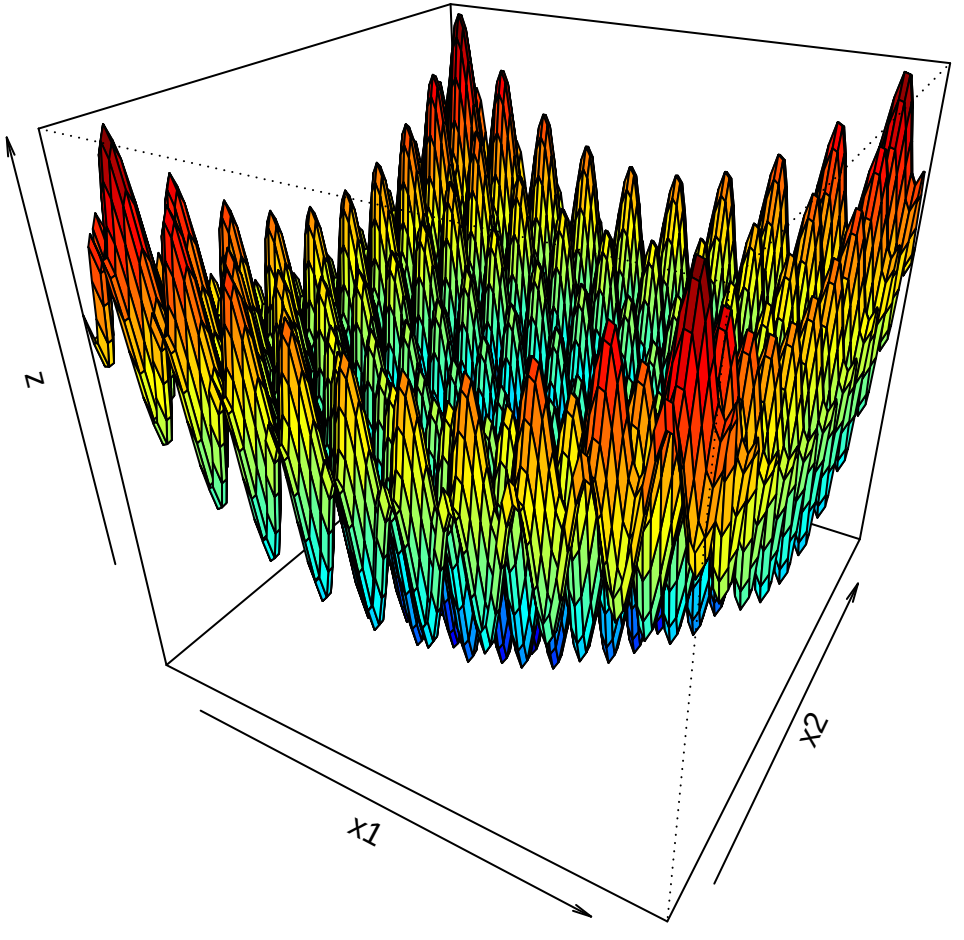

Initial sequence of traveling salesman problem
Distance = 29625
Stockholm
Copenhagen
Hamburg
Hook of Holland
Calais
Brussels
Cologne
Cherbourg
Paris
Lisbon
Madrid
Lyons
Munich
Geneva
Vienna
Gibraltar
Marseilles
Barcelona
Milan
Rome
Athens

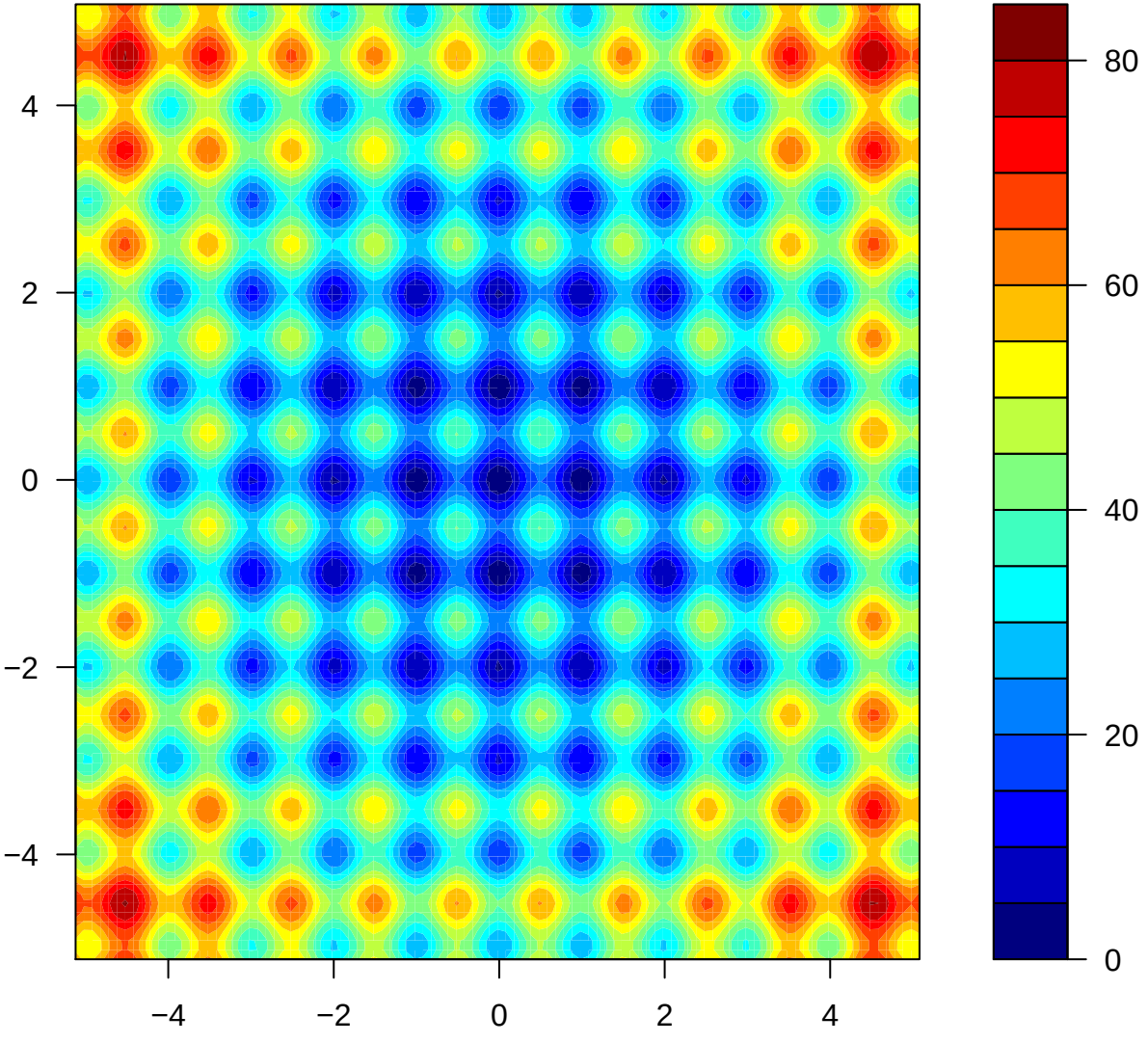

optim_ARS() 'solving' traveling salesman problem
Distance = 16721
Stockholm
Copenhagen
Hamburg
Hook of Holland
Calais
Brussels
Cologne
Cherbourg
Paris
Lisbon
Madrid
Lyons
Geneva
Munich
Vienna
Gibraltar
Barcelona
Marseilles
Milan
Rome
Athens


optim() 'solving' traveling salesman problem
Distance = 12842
Stockholm
Copenhagen
Hamburg
Hook of Holland
Calais
Brussels
Cologne
Cherbourg
Paris
Lisbon
Madrid
Lyons
Munich
Geneva
Vienna
Gibraltar
Marseilles
Barcelona
Milan
Rome
Athens


f(x)
20
15
10
5
−20
−10
0
10
20
x


50
0
−50
−100
f(x)
−10
−5
0
5
10
x


z
x1
x2


4
2
0
−2
−4
−4
−2
0
2
4
80
60
40
20
0