|  |  |
| --- | --- |
|  |  |
| -1 | -1 |
| -1 | 1 |
| 1 | 2 |
| 2 | 3 |

1)



2)   
1.

Now we’ll calculate :

And compare to zero:

From 1 we get :

And from 2:

And we got .

2.as before we will simplify the formula of the partial differentiation and we will get:

And so, we get:

1. We know that and so

3)

1. the predicted value of y is:

2.the two closest neighbors are and their K-NN fit is: