Constraint regions and error functions

The plots for the constraint regions have been plotted below and error function has been covered in the jupyter notebook.

The analysis of the mean squared error is that:

It is **lowest for the degree 1** and is equal to -> **68.8861**

|  |  |
| --- | --- |
| Degree | Error |
| 0.5 | 3991.2597 |
| **1** | **68.8861** |
| 2 | 295.6199 |
| 4 | 2611.5913 |

Also, the above calculations are based on the approximated weights for all the powers and is given as:

|  |  |  |
| --- | --- | --- |
| **Degree** | **W1** | **W2** |
| **0.5** | **0.448** | **0.586** |
| **1** | **0.034** | **0.103** |
| **2** | **0.172** | **0.103** |
| **4** | **0.448** | **0.379** |







