Estimated Functions:

$y_1 = 52.15805\,x - 189.8661$

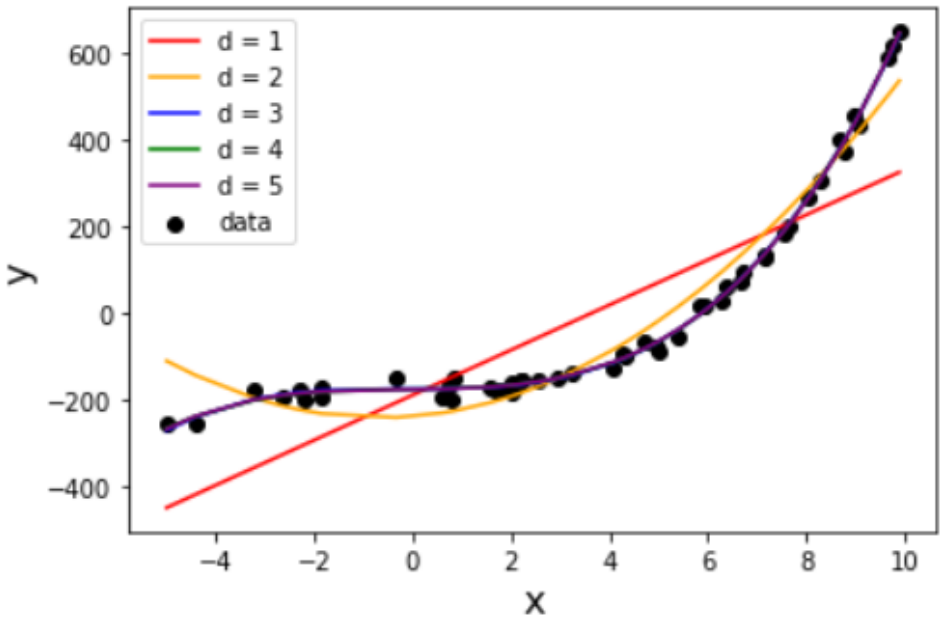
$y_2 = 7.0015\,x^2 + 9.30386\,x - 239.33403$

$y_3 = 0.820138\,x^3 + 0.26176\,x^2 - 0.01032\,x - 175.2771$

$y_4 = 0.00598\,x^4 + 0.75521\,x^3 + 0.23455\,x^2 + 1.17636x - 175.88028$

$y_5 = 0.00085\,x^2 - 0.0046x^2 + 0.7528\,x^2 + 0.5260\,x^2 + 0.9659\,x - 176.8373$

Data Visualization:



Discussion:

Based on the data plotting, it would appear the data best follows a 3rd order polynomial. It is also concluded that the 4th and 5th order could overfit the data. 1st order and 2nd order have too large of an error when compared to higher order polynomial fits.