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Problem1_writeup

Estimated Functions:

$y_1(x) = 29.05867495x + 92.76756053$

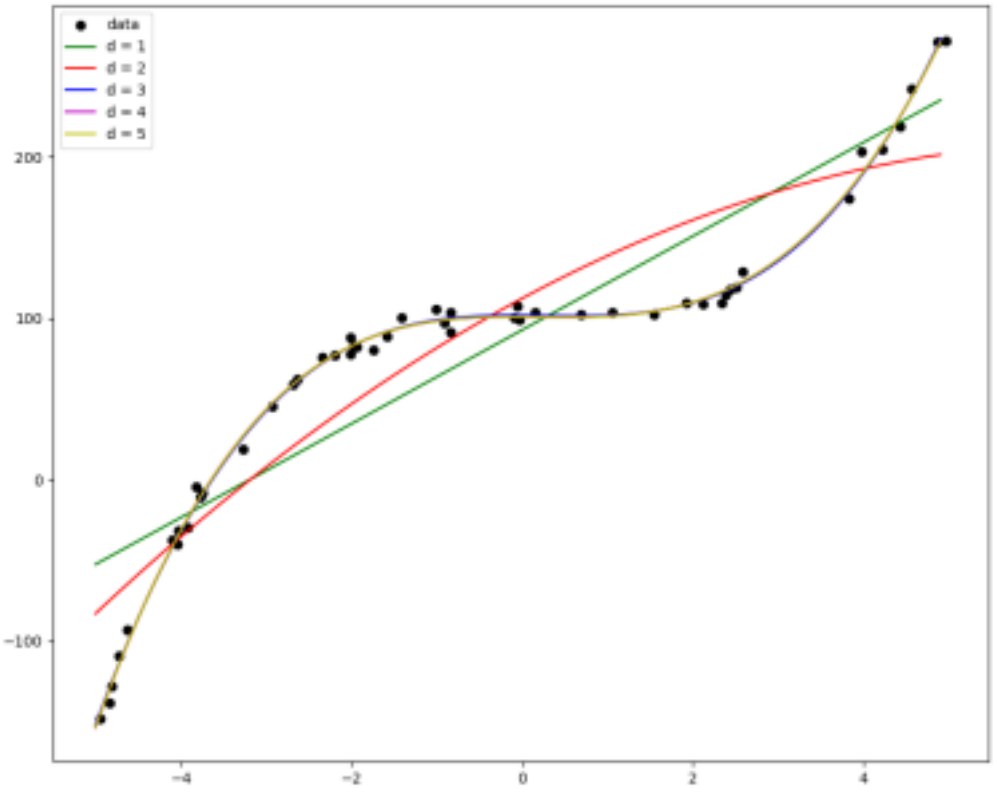
$y_2(x) = -2.11108454x^2 + 28.50662487x + 112.31481224$

$y_3(x) = 1.75743661x^3 - 1.43242754x^2 - 0.3307411x + 101.86611055$

$y_4(x) = -1.51249835e^{-2}x^4 + 1.75412364x^3 - 1.08212257x^2 - 2.55843975e^{-1}x + 1.00914532e^2$

$y_5(x) = -4.45092599e^{-4}x^5 - 1.54226284e^{-2}x^4 + 1.76681929x^3 - 1.07434416x^2 - 3.22742703e^{-1}x + 1.00887487e^2$

Data Visualization:



The fifth degree polynomial is the one that seems to fit the data points the best, as at x = 0, Y = 100