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### Problem1\_writeup

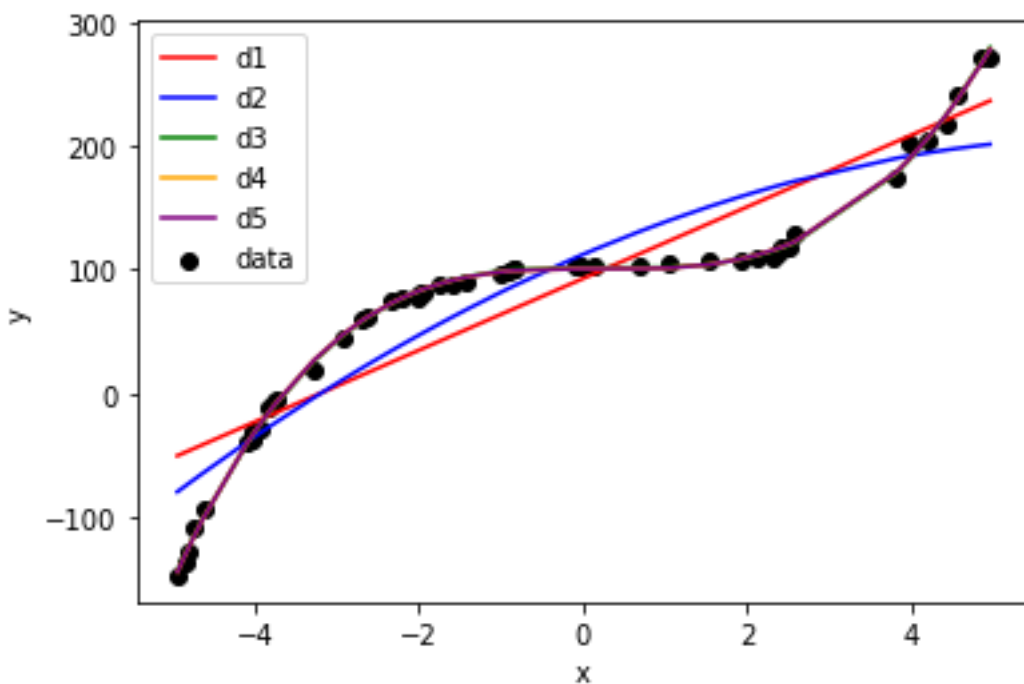
$$y1(x) = 29.05867495x + 92.76756053$$

$$y2(x) = -2.11108454x^2 + 28.50662487x + 112.31481224$$

$$y3(x) = 1.75743661x^3 - 1.43242754x^2 - 0.3307411x + 101.86611055$$

$$y4(x) = -1.51249835e-02x^4 + 1.75412364e+00x^3 - 1.08212257e+00x^2 - 2.55843975e-01x + 1.00914532e+02$$

$$y5(x) = -4.45092599e-04x^5 - 1.54226284e-02x^4 + 1.76681929e+00x^3 - 1.07434416e+00x^2 - 3.22742703e-01x + 1.00887487e+02$$



the data seems to follow degree 3, 4, 5 from the graph and if we predicted a datapoint of  $x=2$ , the value would be 109.534