

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Consider the function $f(x) = -x^3 + 5x^2 - 3x$.

(a) Sketch **neatly** its graph in the window $[-3, 7] \times [-3, 10]$.

(b) What is the relative minimum and what is the relative maximum point?

Minimum = (,), Maximum = (,).

2. Consider the data in the following table:

x	-3	-2	0	1	3	5	8
y	1	-1	-0.5	0.5	2	3.5	5

(a) The linear regression curve is:

(b) The quadratic regression curve is: