

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 data set

$x$	-2	-1	0	1	2
$y$	5	3	1	3	7

(a) Is  $y$  a function of  $x$ ? **Explain.**

(b) Is  $x$  a function of  $y$ ? **Explain.**

2. Use your calculators to present a **complete graph** of  $f(x) = x^4 - x^3$  if you know that it has at most three turning points. Please, **label your axes.**