

Name: _____

Math 124 Quiz 6

6 December 2001

Instructions: No notes or calculators allowed. Please turn off all cell phones and pagers. Make sure you do both sides of this.

1. Let $f(x) = x^4 - 4x^3 + 2$.

- (a) (4 points) Find the absolute maximum and minimum values of $f(x)$ on the interval $[-1, 4]$.

1 (continued). $f(x)$ is still $x^4 - 4x^3 + 2$.

(b) (6 points) Sketch the function $f(x)$, with domain $-1 \leq x \leq 4$. Please label important points in the graph (for example: maxima, minima, critical points, inflection points).