Math 140, Section 5

Quiz #6

February 23, 2001

Note: Calculators are not allowed.

Let $f(x) = x^3 + 4\,|x|$.

1. Find all critical points, local maxima, and local minima of $f(x)$.

2. Find the absolute maximum and absolute minimum (M and m) of $f(x)$ over the interval $-2 \leq x \leq 1$.