

Math 180
Winter, 2009

Name _____

Homework #10
Due Tuesday, January 27
No late homework accepted! No excuses!

1. Find the extrema of $f(x) = 3x^4 - 4x^3$ on the interval $[-1, 2]$.

2. Find the extrema of $f(x) = 2x - 3x^{\frac{2}{3}}$ on the interval $[-1, 3]$.

3. Find the extrema of $f(x) = 2 \sin x - \cos(2x)$ on the interval $[0, 2\pi]$.

4. Find any critical numbers of the function $f(x) = x\sqrt{4-x}$.