

235 Group Quiz 7**Name****Section**

October 28, 2010

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Work in groups but do NOT split up problems or tasks. You must discuss each problem as a group and agree on a final answer. Hand in one quiz per group. You may use your class notebooks but no other materials or technology. Please keep your discussions quiet.

1. Consider the function $f(x) = x^2 + x^{-2}$. In each problem below, justify your work with number lines and other limit/derivative/value information presented in logical order. Make an argument, not a bunch of chicken scratch.

a) Find the global minimum of $f(x)$ on $[-2, 2]$, if any.

b) Find the global maximum of $f(x)$ on $[-2, 2]$, if any.

c) Find the global maximum of $f(x)$ on $[\frac{1}{2}, 2]$, if any.