Quiz 5 - MATH 151 DATE: Week 5, February 25 - 29 INSTRUCTOR: George Voutsadakis

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. Graph the function showing clearly all critical points (5 points)

$$f(x) = \begin{cases} -x, & \text{if } x < 1\\ \log_2 x, & \text{if } x \ge 1 \end{cases}$$

2. Find the following for the function f of Problem 1. (5 points)

$$\lim_{x \to 1^-} f(x), \quad \lim_{x \to 1^+} f(x), \quad \lim_{x \to 1} f(x).$$