

CALCULUS 131: ASSIGNMENT 7

Due Friday, November 10, in class. Worth a total of 75 points.

Please answer the following questions:

Section 2.1: Problems 10, 12, 16, 20, 22 (4 points each; you may use the rules for finding derivatives from section 2.3 if you want).

Section 2.2: Problems 2, 6, 14 (5 points each; you may use either definition of derivative; i.e. $f'(x) = \lim_{h \rightarrow 0} (f(x+h) - f(x))/h$ or $f'(x) = \lim_{t \rightarrow x} (f(t) - f(x))/(t - x)$).

Section 2.3 Problems 4, 8, 18, 24, 28, 34, 42, 46 (3 points each), 52, 56 (4 points each).

Problem A: Consider the graphs in problems 38, 40, 42 and 44 of section 2.2. At what points (if any) is each function not differentiable? (8 points).

Bonus Problem: Section 2.2 Problem 70 (10 points).