
Name: _____

QUIZ 2

MATH 200, SECTION 3
June 2, 2021

1. (15 points) Use the **limit definition** of the derivative to find the derivative of $f(x) = \frac{x}{x+1}$.

2. (35 points) Use derivative rules to find derivatives of the following functions.

(a) $f(x) = \frac{x}{x+1}$

(b) $f(x) = 5x^6 + e^x + 3$

(c) $f(x) = \sqrt{x} + \tan(x)$

(d) $f(x) = \pi x \cos(x)$

(e) $f(x) = \frac{xe^x}{x^2 + 1}$