

Last Name: _____

First Name: _____

Student ID: _____

Quiz 8

Question 1. (5 marks) Determine where the following function is concave upward and where it is concave downward. Find any inflection points.

$$f(x) = 6x^3 - 18x^2 + 12x - 15$$

Question 2. (5 marks) Use the second derivative test to find any relative ~~extrema~~ ^{extrema} of:

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