

9/25/2000
Dr. Lunsford

MA303 Calculus I
Quiz 5

Name: _____
(20 Points Total)

I. Use the definition of the derivative function to find $f'(x)$ where $f(x) = x^2 - x - 1$. Obviously you should get $f'(x) = 2x - 1$ for your answer! I want you apply the definition of the derivative to derive this answer! (10 points)

II. Using the fact that $f'(x) = 2x - 1$ when $f(x) = x^2 - x - 1$, find the equation of the tangent line to f at $x = 1$. Below you are given the graph of $f(x) = x^2 - x - 1$. Graph the tangent line on the same axes, showing all x and y intercepts of the tangent line on the graph. Neatly show all of your work to justify your answers. (10 points)

