

Name _____

Mathematics 105D: Calculus I
Fall Semester 2012
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Quiz #26

I. Evaluate $\int_0^4 \sqrt{x} dx$.

II. Suppose $F(x) = \int_{-2}^x t^3 dt$.

A. Give a formula for $F'(x)$.

B. Use this formula to calculate $F'(2)$.

C. Calculate $F(2)$ [You don't have to work too hard on this...but you are welcome to. Hint: 3 is an odd integer.]

D. Give an equation of the tangent line to $y = F(x)$ at the point where $x = 2$