

Quiz 6, Calculus I

Dr. Graham-Squire, Spring 2013

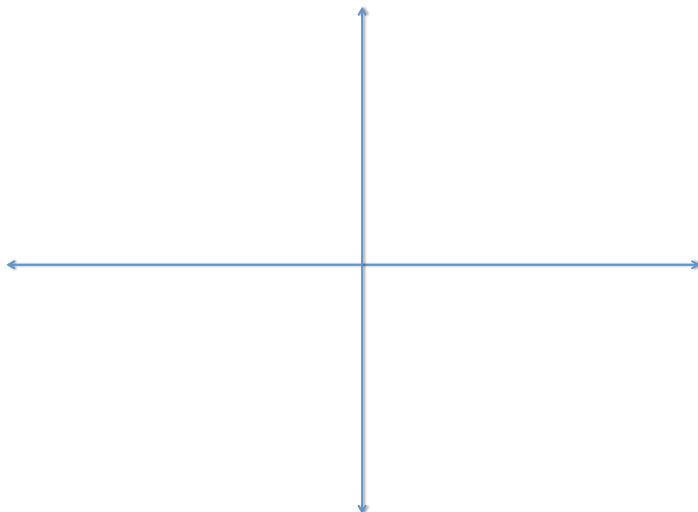
Name: _____

1. (5 points) Find the indefinite integral (i.e. the most general antiderivative).

$$\int \left(\cos x + \frac{x^2}{x^5} \right) dx$$

2. (5 points) Use a Riemann sum with four subintervals evaluated at the midpoint (that is, calculate M_4) to approximate the value of

$$\int_{-1}^3 (4x^2 + 1) dx$$



3. (Extra credit: 1 point) Use an antiderivative to calculate the exact value of $\int_{-1}^3 (4x^2 + 1) dx$.