

NAME _____

MATH 2401 PRACTICE QUIZ 5

1. Use Newton's method with the specified initial approximation x_1 to find x_3 , the third approximation to the root of the given equation. (Give your answer to four decimal places.)

$$x^3 - x^2 - 1 = 0, x_1 = 1$$

2. Find an **antiderivative** of the given function.

$$f(x) = x^4 + 3\cos x$$

3. Find the function f if $f'(x) = 8x^3 + 12x + 3$ and $f(1) = 6$.