

NAME :

1. Consider the algebraic curve defined by $x^4 - 2y^3 + x^2y = 0$.

Give the Sage commands to compute the derivative at the point $(1, 1)$.

Also write the expression for the derivative.

2. Consider the Taylor series of $\log(1 + x)$ at $x = 0$.

Use `sympy` to define a generator for the next term in the Taylor series.

Illustrate the use of this generator to compute a list of the first 10 terms.

Homework Assignment:

Bring to class on Monday the print out of a Sage notebook with your answers to assignments 2 and 3 of lecture 20; assignments 2 and 4 of lecture 21; and assignment 3 of lecture 22.