

Spring 2024 Math 584 - Singularity Theory
Homework 4 - Newton algorithm; Discriminant
Due: 4/4/2024

WALL: Wall, Singular Points of Plane Curves

DF: Dummit&Foote, Abstract Algebra

1. Find as many parametrizations as you can around the singular point $(0, 0)$ of the set

$$y^4 - 2y^2x^3 - 4yx^5 + x^6 - x^7 = 0.$$

2. WALL, ex 2.6.10

3. DF, 14.6.31,32