

Compulsory exercise, MAT4210 2015

24. februar 2015

1. Exercise 2.15 (A Quadratic Surface) in Hartshorne.
2. Let $C \subset A^2$ be the curve defined by $y^3 = x^4$. Show that after successive blowups the singularity of this curve at the origin may be removed, i.e. that there exist a nonsingular curve C' and a birational morphism $C' \rightarrow C$. Show furthermore that C is rational.

Deadline: Thursday, March 12.