

MATH 8253: ALGEBRAIC GEOMETRY
HOMEWORK 3
DUE WEDNESDAY, OCTOBER 19, 2:17 P.M.

INSTRUCTOR: SASHA VORONOV

1. Review your course notes and read Gathmann's *Chapter 4 : Morphisms* from *Section 4.15* through the end, *Chapter 5 : Varieties*, and *Chapter 6 : Projective Varieties I: Topology* through *Section 6.18*. Do Exercises 4.19, 5.7, 5.8, 5.11, 5.22, 5.24, 6.8, 6.14.
2. Do not hesitate to send me an email at voronov@umn.edu, should you have a question or need a hint. I am also holding office hours Monday, Tuesday, and Thursday. Times have been adjusted as compared to the initial syllabus — check the class home page.
3. Submit the homework by the start of our Wednesday, October 19, class meeting, *i.e.*, by 2:17 p.m. If you can submit it electronically to Gradescope at <https://www.gradescope.com/courses/445177>, it would be greatly appreciated.