

AG HOMEWORK 1

DUE FEBRUARY 17 TO GRADESCOPE

The following exercises come from Hartshorne Chapter 1. (If you need a copy of the book, let me know/send me an email.)

A note on homework: for those of you interested in pursuing algebraic geometry as a research direction, doing all of the problems is essential! Most of the problems in these sections are fundamental examples and constructions in algebraic geometry, which is why there are so many!

- (1) 1.1 (a) and (b)
- (2) 1.2
- (3) 1.3
- (4) 1.8
- (5) 1.9
- (6) 1.12
- (7) 2.9
- (8) 2.10
- (9) 2.12
- (10) 2.13
- (11) 2.14
- (12) 2.15